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# Petroleum Supply Monthly

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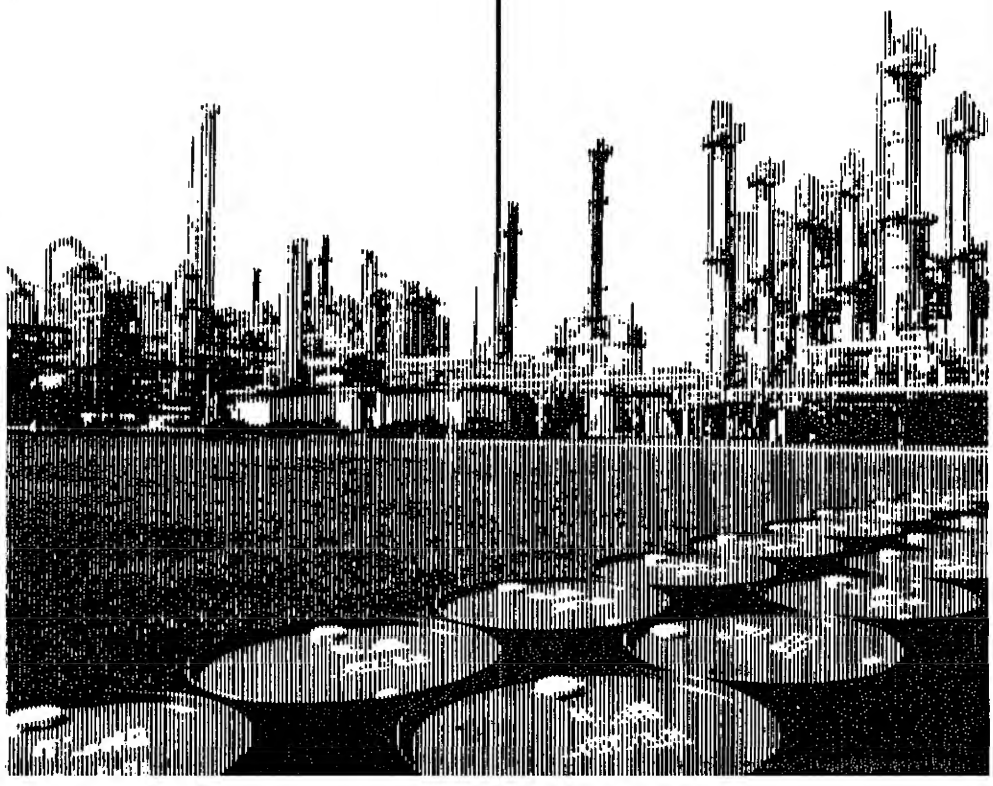
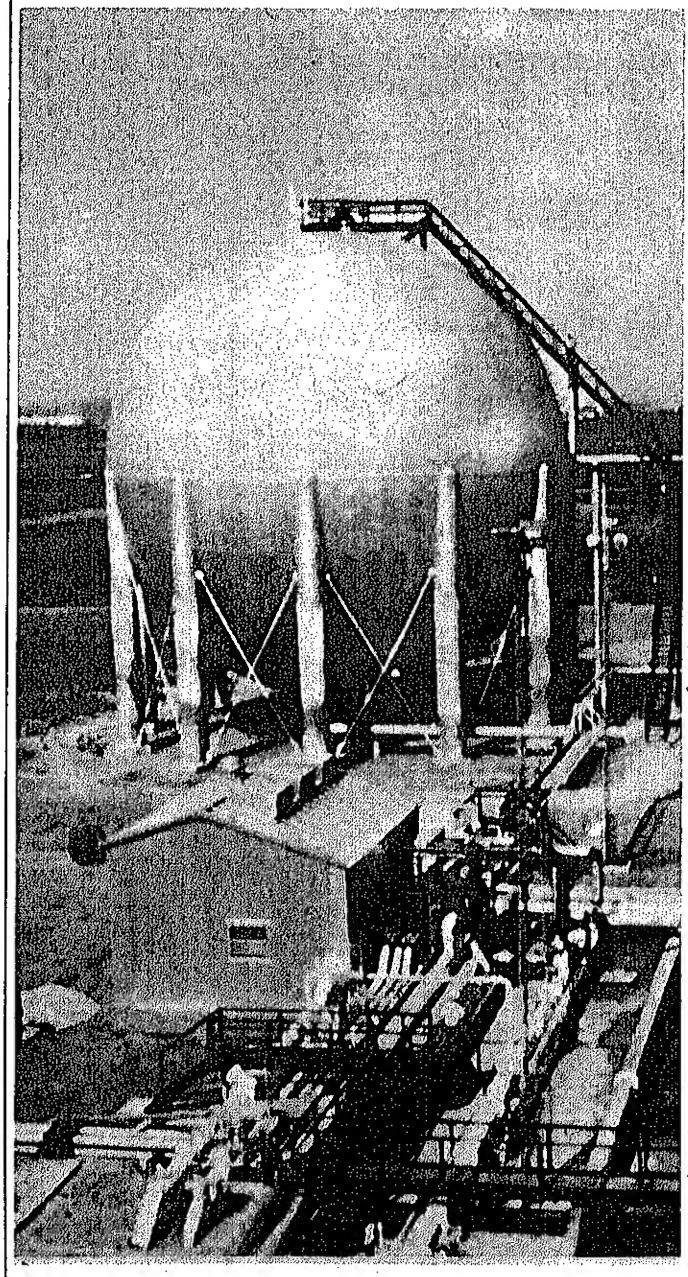


# Contents

## This Month in the PSM

Background data relating to Liquefied Petroleum Gas (LPG) are discussed in this month's *Petroleum Supply Monthly*. International developments, U.S. trends, and EIA's projections for the near future and the longer term are included in the Petroleum Focus article, "LPG Market Trends," beginning on page ix. This article is supplemented by a "box" appearing on page xi that presents some common LPG terminology and a simplified diagram illustrating the flow between LPG sources and processing stages.



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## Figures

# Petroleum Focus

# Petroleum Supply Summary

| Average Volume for Period (Million Barrels Per Day) | October 1983 | October 1982 | October % Change | Cumulative January Through October 1983 | Cumulative January Through October 1982 | Cumulative January Through October % Change |
|---|---|---|---|---|---|---|
| Total Product Supplied | 15.4 | 14.9 | 3.7 | 15.0 | 15.3 | – 1.7 |
| Motor Gasoline | 6.7 | 6.4 | 5.1 | 6.6 | 6.5 | 1.1 |
| Distillate Fuel Oil | 2.6 | 2.6 | – 0.2 | 2.6 | 2.7 | – 3.0 |
| Residual Fuel Oil | 1.3 | 1.5 | – 11.9 | 1.4 | 1.7 | – 19.6 |
| Crude Inputs to Refineries | 11.8 | 11.7 | 0.3 | 11.7 | 11.8 | – 1.0 |
| Crude Oil and Natural Gas Liquids Production | 10.3 | 10.2 | 2.0 | 10.2 | 10.2 | 0.4 |
| Net Imports[1] | 4.8 | 4.4 | 9.7 | 4.2 | 4.3 | – 1.4 |
| Net Crude Oil Imports[2] | 3.4 | 3.2 | 6.6 | 2.9 | 3.1 | – 5.4 |
| SPR Imports | 0.2 | 0.2 | – 1.4 | 0.2 | 0.2 | 45.8 |
| Net Product Imports | 1.2 | 1.0 | 22.2 | 1.1 | 1.0 | 2.8 |
| Crude Oil Stock Withdrawal[2] | – 0.05 | – 0.33 | — | – 0.01 | 0.04 | — |
| Product Stock Withdrawal | 0.16 | – 0.05 | — | 0.14 | 0.31 | — |
| Stocks at End of Period (Million Barrels) | | | | | | |
| Crude Oil[2] | 353 | 351 | NM | | | |
| Motor Gasoline[3] | 222 | 234 | NM | | | |
| Distillate Fuel Oil | 162 | 170 | NM | | | |
| Residual Fuel Oil | 47 | 64 | NM | | | |
| Total Product | 771 | 797 | NM | | | |
| SPR | 367 | 285 | 29.1 | | | |
| Total | 1,491 | 1,432 | NM | | | |

[1]Gross Imports of crude oil including Strategic Petroleum Reserve (SPR) and petroleum products less exports of crude oil and petroleum products.
[2]Excluding SPR.
[3]Including blending components.
NM = Not meaningful due to new stock basis.
Note: Percent changes are based on unrounded values. October 1983 data are estimates based on weekly data, except for export and Natural Gas Liquids Production estimates which are September 1983 monthly values. Totals may not be equal to sum of components due to independent rounding.
Source: Energy Information Administration, *Petroleum Supply Monthly*, November 1983.

# LPG Market Trends

The Energy Information Administration (EIA) collects information and data relating to liquefied petroleum gas (LPG) in various surveys, such as the Monthly Natural Gas Liquids Report, the Monthly Refinery Report, the Monthly Petroleum Product Sales Report, and annual Sales of Liquefied Petroleum Gases. National, regional, and some State data from these surveys are published in the *Petroleum Supply Monthly*, *Petroleum Supply Annual*, *Petroleum Marketing Monthly*, *Monthly Energy Review*, and other EIA publications. This article presents an analysis of recent developments in the LPG market and projections for both the near term and longer term based on these data.

## Free World LPG Market

During the past decade most of the growth in Free World LPG supply occurred in the Middle East, North Africa, and Indonesia, while consumption increases were most significant in Japan and Western Europe. In recent years, sizeable trade relationships developed between producing and consuming nations. Meanwhile, the United States has remained virtually self-sufficient with regard to LPG. Consumption in the United States has been met predominantly by domestic production, and this country has had relatively little participation in the Free World market.

According to EIA's latest *Annual Energy Outlook*,[1] Free World energy consumption through 1990 is expected to grow at a rate of about 1 to 2 percent per year in the industrialized countries, with some faster growth in the developing economies. In the United States, the average annual growth rate for energy consumption through 1990 is projected to be slightly less than 2 percent, while the rate for LPG consumption growth is projected to be slightly above 2 percent.

Consumption in Japan, the second largest consumer of LPG in the Free World, is expected to increase to meet growing industrial needs and to fuel automobiles and trucks, to reduce pollution in metropolitan areas. Consumption in Western Europe is also expected to experience some limited growth, primarily in the industrial sector.

## U.S. Long Term LPG Market

According to EIA's *Annual Energy Outlook*, the industrial sector, including petrochemical feedstocks, is expected to remain the largest consumer of LPG in the United States through 1990. Nationwide, this is the only economic sector in which significant LPG consumption increases are expected during this period. Growth in LPG use for feedstock purposes is expected to more than offset declining fuel and power uses in this sector.

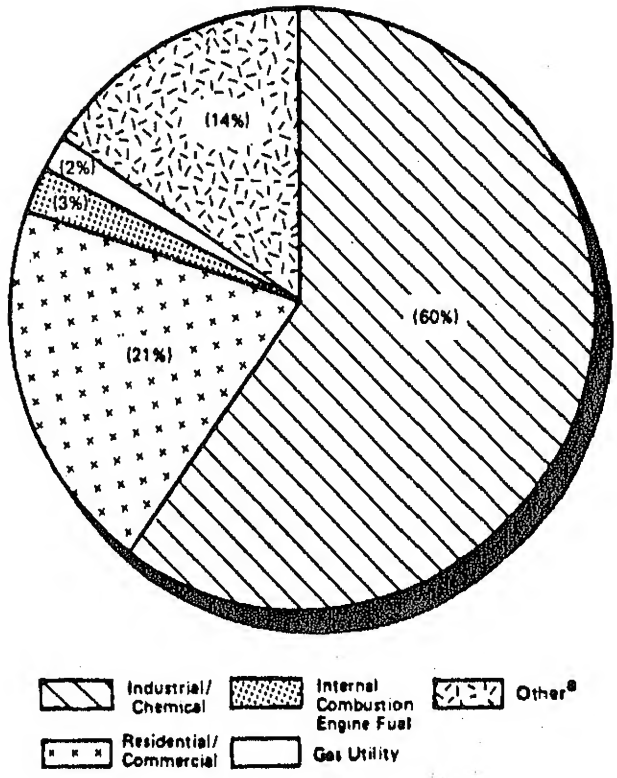
Again at the national level, consumption by the residential/commercial sector is expected to remain constant for the next few years, with a slight decline near the end of the decade, as electricity and other energy forms replace LPG use in homes.

No significant growth is projected for transportation use of LPG at the national level. However, some analysts believe there is considerable potential for development in local transportation markets.

## Current Usage Patterns

EIA's latest *Petroleum Supply Annual*[2] shows about 60 percent of total U.S. LPG sales in 1982 were to the industrial/chemical sector, while about 21 percent went to the residential/commercial sector. The chemical market was the largest single end-use component, with 49 percent of 1982 sales (see Figure 1).

**Figure 1. Sales of Liquefied Petroleum Gases by End Use, 1982.**




[a]Includes farm use, use as synthetic natural gas feedstock, and use in crude oil secondary recovery projects.
**Source:** Form EIA-174.

[1]Energy Information Administration, *1982 Annual Energy Outlook*, DOE/EIA 0383(82), April 1983.
[2]Energy Information Administration, *Petroleum Supply Annual 1982*, DOE/EIA-0340(82)/1, June 1983.

EIA's most recent *Residential Energy Consumption Survey*[3] shows that nationwide, 1 out of 11 U.S. households used LPG during the year ending March 1982. In about half of these households, LPG was the main heating fuel and consumption averaged about 730 gallons for the survey period.

## Short-Term Projections

Projections from EIA's latest *Short-Term Energy Outlook*,[4] cover the 1983-84 heating season and extend through the end of 1984. The following are some highlights from that report:

- U.S. crude oil consumption is expected to bottom out in 1983 and begin rising again through 1984. In contrast, world crude oil consumption in 1984 is expected to decline for the fourth consecutive year.
- Assuming flat world crude oil prices, petroleum product prices in the United States are expected to remain relatively stable through 1984.
- Prices of natural gas and electricity for residential use in 1984 are projected to average 7 to 8 percent above year-earlier levels, in nominal terms.
- The U.S. economic recovery that began early in 1983 is expected to continue through 1984. The recovery is expected to result in increased energy consumption during the fourth quarter of 1983, contingent upon a return to normal winter weather.
- LPG consumption in the United States is expected to remain essentially unchanged during 1984 and to follow normal seasonal patterns.

These projections are based on the best information available, however, changing conditions at home and abroad can dramatically change markets for individual energy sources. For example, recent petroleum supply data[5] show how events in the world LPG market can affect the domestic propane market:

- The United States used about 800,000 barrels of propane per day during 1981 and 1982, excluding mixes.
- Prior to October 1981, propane exports were restricted, and the United States exported less than 10,000 barrels per day, equivalent to about 1 percent of U.S. consumption.
- Following the relaxation of export restrictions, propane exports grew, and in 1982, averaged about 30,000 barrels per day, equivalent to 4 percent of domestic consumption.
- In the first quarter of 1983, U.S. propane exports climbed to 70,000 barrels per day, equivalent to about 8 percent of domestic consumption. This growth is attributed to the anticipation of a shortfall of propane on the world market when a major supplier, Saudi Arabia, reduced its crude oil production to alleviate a world over-supply of crude oil. Japan, and other users of Saudi Arabian propane, sought alternate sources of supply on the open market. U.S. producers met some of that demand.
- The volume of U.S. exports was equivalent to less than 10 percent of U.S. consumption. Although the surge in exports lasted only a few months, it was sufficient to have an impact on domestic stocks and prices.
- During the first quarter of 1983, U.S. stocks of propane were drawn down by about 6 million barrels to meet this level of exports. This drawdown was in addition to normal winter withdrawals and, as a result, U.S. propane stocks dropped to 41 million barrels in April 1983, their lowest level in years. During the same period, propane prices on the U.S. spot market rose to around 50 cents per gallon, up from 30 to 40 cents per gallon a year earlier.
- U.S. exports of propane dropped back to about 25,000 barrels per day by June, and by August, stocks were rebuilt to about 60 millions barrels, almost as high as 1 year earlier levels. However, spot prices remained around 50 cents per gallon.

These events suggest that while the United States is self-sufficient in LPG supply, this nation is nevertheless subject to the influence of the world marketplace. Volumes of LPG's that appear small when viewed from a national perspective can have a significant impact on prices and availability. While EIA expects adequate supplies and relatively stable prices in the near term, disruptions of supplies to other major consuming nations could bring a return to tight market conditions and upward pressures on U.S. prices.

[3]Energy Information Administration, *Residential Energy Consumption Survey*, DOE/EIA-0321/1(81), September 1983.
[4]Energy Information Administration, *Short Term Energy Outlook*, DOE/EIA-0202(83/3Q) August 1983.
[5]See "Summary Statistics" *Petroleum Supply Annual* (1981 and 1982) and *Petroleum Supply Monthly* (1983).

### Changes in LPG Reporting

The Energy Information Administration plans to institute changes to Natural Gas Liquids (NGL) and Liquefied Petroleum Gases (LPG) data surveys to simplify reporting and to improve the quality of NGL and LPG statistics. These changes were developed through the cooperation of survey respondents and data users in industry, Federal and State governments and academic institutions.

Beginning in January 1984 statistics will be reported by component (propane, butane, isobutane, ethane, and pentanes-plus). The reporting of ethane-propane mix, butane-propane mix and unfractionated streams which has led to misclassification and overcounting will be eliminated. A detailed description of the changes will be contained in the January 1984 "Petroleum Supply Monthly".

# Liquefied Petroleum Gas Terminology

Hydrocarbon liquids condensed from natural gas are known as natural gas liquids (NGL). They include the lighter liquids: ethane, propane, and butane, and mixtures of these compounds. Heavier NGL's, extracted at natural gas processing plants, include natural gasoline, plant condensate, and pentanes plus. "Liquefied petroleum gas" (LPG) as used in the accompanying article, includes all ethane, propane, butane, and isobutane condensed from natural gas or liquefied at refineries. The term "LPG" is used in a narrower context in the industry to denote propane, butane, and mixtures consisting mainly of these compounds.

The simplified flow diagram below illustrates the flow between LPG sources and processing stages. About 80 percent of LPG production comes from natural gas processing, shown on the top half of the diagram. The remaining production stems from refinery processing of crude oil. Condensate produced at gas wells (lease condensate) generally merges with the crude oil stream and EIA data include it as part of that stream. In contrast, EIA data include condensate which originates at gas processing plants (plant condensate) with NGL production rather than with crude oil production.

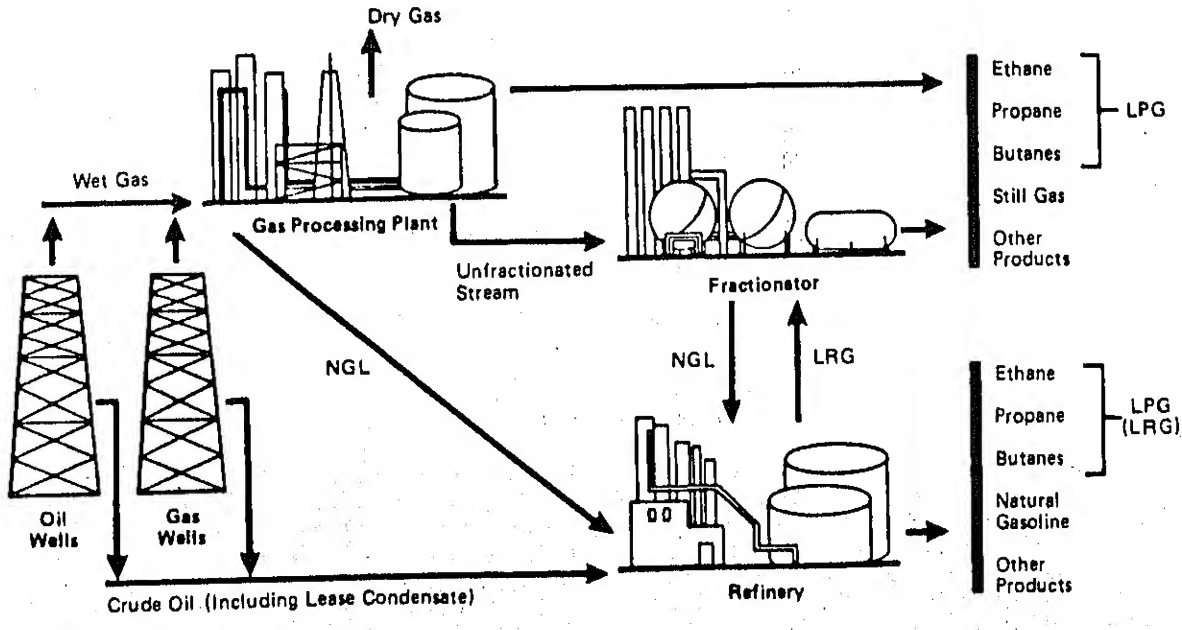
NGL's are recovered from "wet" gas streams at gas processing plants. Some plants yield "unfractionated streams," or NGL mixes, that are further processed at fractionators to yield ethane, propane, and butane.

Large quantities of natural gas liquids flow from gas processing plants and fractionators to refineries. These liquids consist principally of LPG's and heavier NGL's. Smaller amounts of liquefied refinery gases flow from refineries to fractionators for processing. The term "liquefied refinery gas," or LRG, is sometimes used to denote LPG produced at refineries.

LPG's have become an increasingly important part of the energy picture over the last decade; among petroleum products, only motor gasoline and distillate fuel oil substantially exceed LPG usage. Chemical feedstock is the principal non-energy use for LPG and currently accounts for about half of LPG sales. LPG is also used as fuel or gasoline blending components within the petroleum industry, accounting for about 15 percent of total LPG supply.

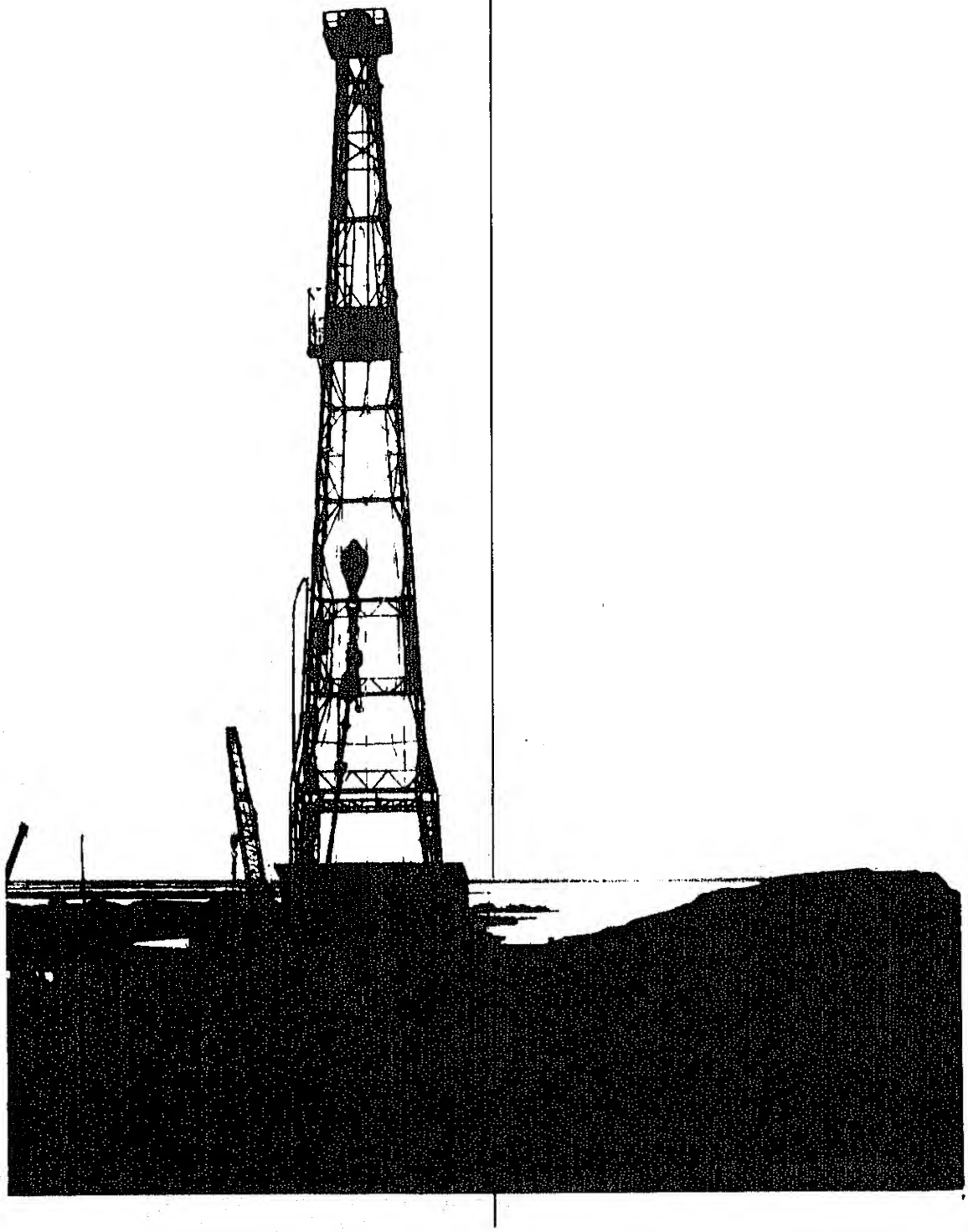
There are distinct uses for individual LPG products. Ethane, the lightest LPG, is used primarily as a petrochemical feedstock. Propane, which constitutes the largest portion of LPG production, serves as an energy source for residential, commercial, and industrial users, and is also used as a petrochemical feedstock. LPG mixes consist principally of ethane-propane mixes destined for the petrochemical sector. More than half of the butane is blended into gasoline and nearly all of the isobutane is used in manufacturing gasoline blending components.

## LPG Sources and Processing Stages




Source: Energy Information Administration

# Summary Statistics



## Crude Oil[1] and Petroleum Products Overview

| | Field Production | | | Stock Withdrawal[2] | | | Ending Stocks[3] |
|---|---|---|---|---|---|---|---|
| | Total Domestic[4] | Crude Oil | Natural Gas Plant Production | Crude Oil[5] | Petroleum Products | Petroleum Products Supplied | Crude Oil[5] and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973 AVERAGE** | **10,975** | **9,208** | **1,738** | **11** | **-146** | **17,308** | **1,008** |
| **1974 AVERAGE** | **10,498** | **8,774** | **1,688** | **-62** | **-117** | **16,653** | [6] **1,074** |
| **1975 AVERAGE** | **10,045** | **8,375** | **1,633** | **-17** | **-145** | **16,322** | **1,133** |
| **1976 AVERAGE** | **9,774** | **8,132** | **1,603** | **-39** | **96** | **17,461** | **1,112** |
| **1977 AVERAGE** | **9,913** | **8,245** | **1,618** | **-170** | **-378** | **18,431** | **1,312** |
| **1978 AVERAGE** | **10,328** | **8,707** | **1,567** | **-78** | **172** | **18,847** | **1,278** |
| **1979 AVERAGE** | **10,179** | **8,552** | **1,584** | **-148** | **-25** | **18,513** | **1,341** |
| **1980 AVERAGE** | **10,214** | **8,597** | **1,573** | **-98** | **-42** | **17,056** | [6] **1,392** |
| **1981** January | 10,231 | 8,540 | 1,652 | 50 | 1,159 | 18,430 | 1,388 |
| February | 10,294 | 8,604 | 1,653 | -278 | 250 | 16,989 | 1,389 |
| March | 10,272 | 8,613 | 1,624 | -632 | 224 | 15,907 | 1,401 |
| April | 10,195 | 8,557 | 1,599 | -595 | 148 | 15,350 | 1,415 |
| May | 10,160 | 8,501 | 1,593 | -391 | -374 | 15,353 | 1,438 |
| June | 10,287 | 8,629 | 1,594 | -135 | 406 | 16,095 | 1,430 |
| July | 10,098 | 8,500 | 1,548 | -360 | 91 | 15,682 | 1,439 |
| August | 10,243 | 8,583 | 1,614 | 397 | -999 | 15,263 | 1,457 |
| September | 10,281 | 8,604 | 1,612 | -285 | -341 | 15,655 | 1,476 |
| October | 10,225 | 8,563 | 1,598 | -760 | 477 | 15,822 | 1,485 |
| November | 10,269 | 8,586 | 1,630 | -325 | -233 | 15,593 | 1,501 |
| December | 10,220 | 8,585 | 1,590 | -170 | 745 | 16,596 | 1,484 |
| **AVERAGE** | **10,230** | **8,572** | **1,609** | **-290** | **130** | **16,058** | |
| **1982** January | 10,128 | 8,509 | 1,578 | -401 | 1,298 | 16,124 | 1,456 |
| February | 10,312 | 8,702 | 1,563 | -242 | 1,230 | 16,001 | 1,428 |
| March | 10,284 | 8,667 | 1,572 | 121 | 1,047 | 15,560 | 1,392 |
| April | 10,188 | 8,591 | 1,542 | -37 | 1,583 | 16,046 | 1,346 |
| May | 10,244 | 8,683 | 1,518 | 29 | -66 | 14,847 | 1,347 |
| June | 10,212 | 8,646 | 1,511 | 40 | -489 | 14,998 | 1,360 |
| July | 10,229 | 8,658 | 1,513 | -147 | -926 | 14,821 | 1,393 |
| August | 10,215 | 8,634 | 1,524 | -440 | -44 | 14,839 | 1,408 |
| September | 10,279 | 8,701 | 1,518 | 263 | -447 | 15,022 | 1,414 |
| October | 10,299 | 8,701 | 1,530 | -548 | -47 | 14,859 | 1,432 |
| November | 10,359 | 8,697 | 1,609 | -398 | -361 | 15,009 | 1,455 |
| December | 10,276 | 8,598 | 1,628 | 128 | 688 | 15,487 | [6] 1,430 |
| **AVERAGE** | **10,252** | **8,649** | **1,550** | **-136** | **283** | **15,296** | |
| **1983** January | 10,356 | 8,634 | 1,668 | -567 | 865 | 14,765 | 1,453 |
| February | 10,298 | 8,660 | 1,585 | -382 | 1,128 | 14,772 | 1,432 |
| March | 10,259 | 8,677 | 1,544 | 56 | 1,765 | 15,484 | 1,375 |
| April | 10,229 | 8,686 | 1,502 | -438 | 431 | 14,779 | 1,376 |
| May | 10,231 | 8,682 | 1,483 | 68 | -759 | 14,250 | 1,397 |
| June | 10,262 | 8,676 | 1,514 | -163 | -242 | 15,281 | 1,409 |
| July | 10,237 | 8,647 | 1,536 | 118 | -922 | 14,913 | 1,434 |
| August | 10,257 | 8,653 | 1,561 | -781 | -289 | 15,366 | 1,467 |
| September* | 10,323 | 8,666 | 1,598 | R -191 | R -634 | R 15,396 | R 1,492 |
| October** | NA | **8,654** | NA | *-270* | *163* | *15,408* | *1,491* |
| **AVERAGE** | **NA** | **8,663** | **NA** | **-254** | **144** | **15,043** | |

[1] Includes lease condensate.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Stocks are totals as of end of period.
[4] Includes crude oil, natural gas plant production, other hydrocarbons and alcohol.
[5] Includes stocks located in the Strategic Petroleum Reserve.
[6] In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-1,121, 1980-1,420 and 1982-1,462. Stock withdrawals during 1975, 1981 and 1983 are calculated using new basis stock levels.
Totals may not equal sum of components due to independent rounding.
NA = Not available. R = Revised data.
* See Explanatory Note 9.1.
** Italics denote preliminary data. See Explanatory Note 8.
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

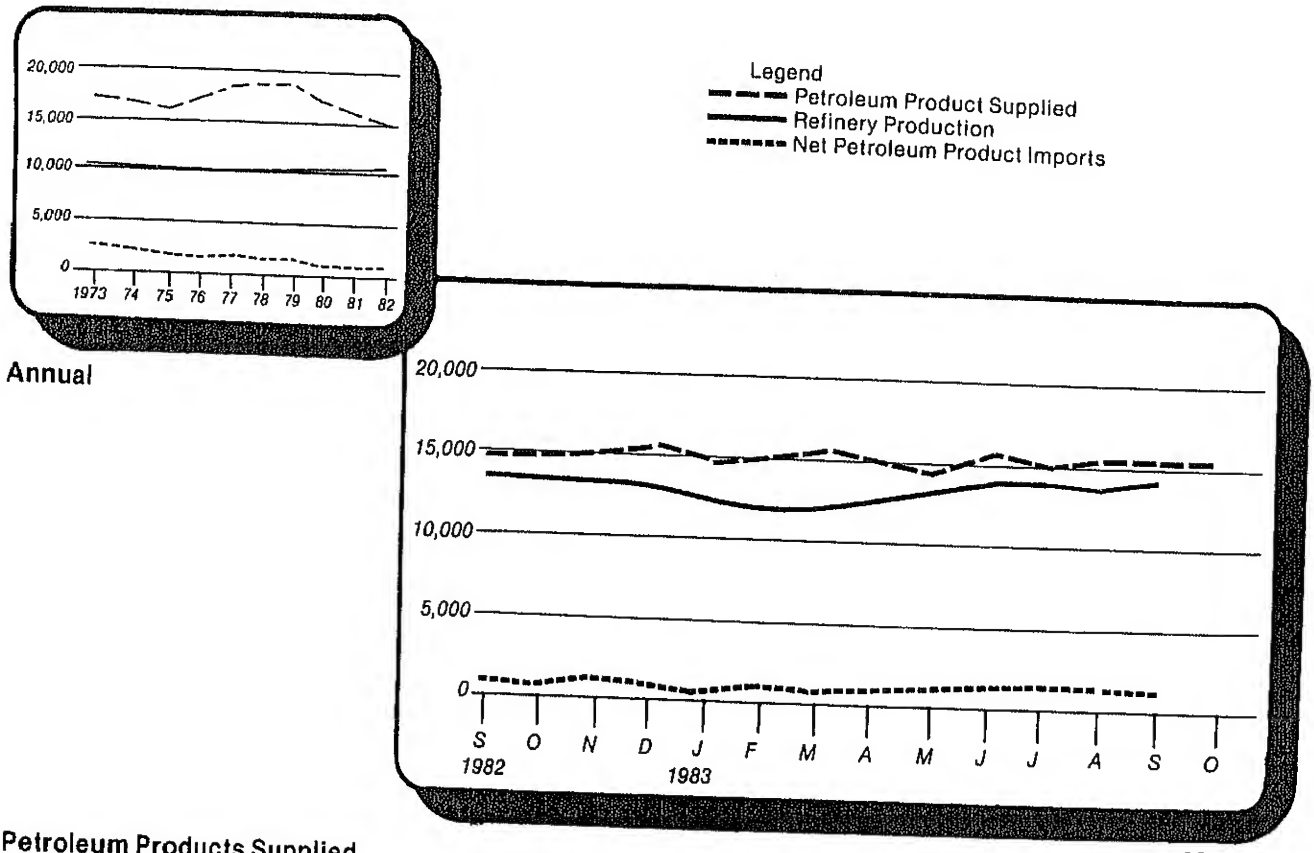
## Crude Oil[1] and Petroleum Products Overview ( continued )

| | Imports | | | Exports | | | |
|---|---|---|---|---|---|---|---|
| | Total | Crude Oil[2] | Petroleum Products | Total | Crude Oil | Petroleum Products | Net[3] Imports |
| | Thousand Barrels per Day | | | | | | |
| **1973 AVERAGE** | **6,256** | **3,244** | **3,012** | **231** | **2** | **229** | **6,025** |
| **1974 AVERAGE** | **6,112** | **3,477** | **2,635** | **221** | **3** | **218** | **5,892** |
| **1975 AVERAGE** | **6,056** | **4,105** | **1,951** | **209** | **6** | **204** | **5,846** |
| **1976 AVERAGE** | **7,313** | **5,287** | **2,026** | **223** | **8** | **215** | **7,090** |
| **1977 AVERAGE** | **8,807** | **6,615** | **2,193** | **243** | **50** | **193** | **8,565** |
| **1978 AVERAGE** | **8,363** | **6,356** | **2,008** | **362** | **158** | **204** | **8,002** |
| **1979 AVERAGE** | **8,456** | **6,519** | **1,937** | **472** | **235** | **237** | **7,984** |
| **1980 AVERAGE** | **6,909** | **5,263** | **1,646** | **544** | **287** | **258** | **6,365** |
| 1981 January | 6,827 | 4,932 | 1,895 | 558 | 339 | 219 | 6,270 |
| February | 6,772 | 4,873 | 1,899 | 569 | 198 | 371 | 6,203 |
| March | 6,028 | 4,521 | 1,507 | 586 | 210 | 376 | 5,442 |
| April | 5,668 | 4,338 | 1,330 | 570 | 198 | 372 | 5,098 |
| May | 5,775 | 4,287 | 1,489 | 595 | 312 | 283 | 5,180 |
| June | 5,435 | 4,061 | 1,375 | 420 | 123 | 297 | 5,015 |
| July | 5,816 | 4,296 | 1,521 | 571 | 257 | 314 | 5,245 |
| August | 5,767 | 4,179 | 1,588 | 644 | 204 | 440 | 5,123 |
| September | 6,365 | 4,740 | 1,624 | 519 | 194 | 325 | 5,845 |
| October | 5,959 | 4,380 | 1,579 | 738 | 226 | 512 | 5,221 |
| November | 5,741 | 4,046 | 1,695 | 701 | 278 | 423 | 5,041 |
| December | 5,843 | 4,137 | 1,706 | 656 | 189 | 467 | 5,187 |
| **AVERAGE** | **5,996** | **4,396** | **1,599** | **595** | **228** | **367** | **5,401** |
| 1982 January | 5,332 | 3,693 | 1,639 | 829 | 238 | 591 | 4,503 |
| February | 4,807 | 2,990 | 1,817 | 804 | 304 | 499 | 4,003 |
| March | 4,484 | 2,874 | 1,610 | 882 | 321 | 561 | 3,602 |
| April | 4,378 | 2,849 | 1,529 | 786 | 174 | 611 | 3,593 |
| May | 4,811 | 3,309 | 1,503 | 803 | 262 | 542 | 4,008 |
| June | 5,327 | 3,836 | 1,491 | 703 | 94 | 609 | 4,624 |
| July | 5,890 | 4,248 | 1,642 | 741 | 229 | 512 | 5,149 |
| August | 5,244 | 3,851 | 1,392 | 858 | 304 | 554 | 4,386 |
| September | 5,414 | 3,636 | 1,778 | 791 | 184 | 606 | 4,624 |
| October | 5,306 | 3,670 | 1,636 | 932 | 270 | 662 | 4,374 |
| November | 5,744 | 3,862 | 1,882 | 786 | 262 | 524 | 4,958 |
| December | 4,606 | 3,000 | 1,605 | 860 | 193 | 667 | 3,746 |
| **AVERAGE** | **5,113** | **3,488** | **1,625** | **815** | **236** | **579** | **4,298** |
| 1983 January | 4,372 | 2,938 | 1,434 | 973 | 117 | 856 | 3,399 |
| February | 3,691 | 2,268 | 1,423 | 865 | 262 | 603 | 2,825 |
| March | 3,629 | 2,232 | 1,398 | 801 | 174 | 627 | 2,829 |
| April | 4,744 | 3,154 | 1,590 | 809 | 88 | 721 | 3,935 |
| May | 4,898 | 3,234 | 1,664 | 848 | 280 | 568 | 4,049 |
| June | 5,218 | 3,502 | 1,716 | 774 | 144 | 630 | 4,443 |
| July | 5,690 | 3,868 | 1,822 | 571 | 145 | 426 | 5,119 |
| August | 6,036 | 4,174 | 1,863 | 663 | 172 | 491 | 5,373 |
| September* | R 6,088 | R 4,221 | R 1,867 | 684 | 177 | 507 | 5,403 |
| October** | *5,482* | *3,785* | *1,697* | NA | NA | NA | NA |
| **AVERAGE** | **4,994** | **3,345** | **1,649** | **NA** | **NA** | **NA** | **NA** |

[1] Includes lease condensate.
[2] Includes crude oil for storage in the Strategic Petroleum Reserve.
[3] Net Imports = Imports minus Exports.
Totals may not equal sum of components due to independent rounding.
NA = Not available. R = Revised data.
* See Explanatory Note 9.1.
** Italics denote preliminary data. See Explanatory Note 8.
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

## Petroleum Overview

(Thousand Barrels Per Day)

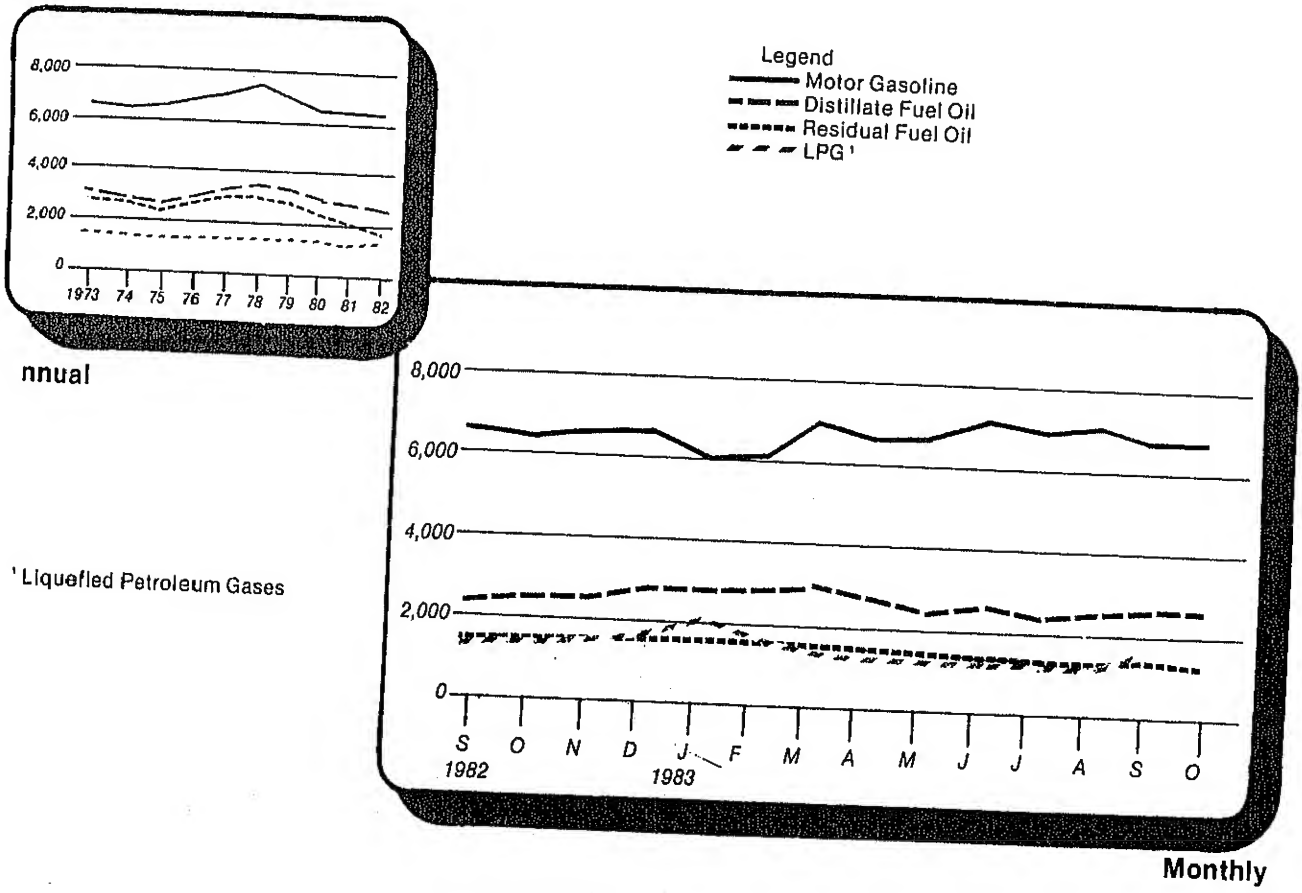



Annual

Monthly

## Petroleum Products Supplied

(Thousand Barrels Per Day)



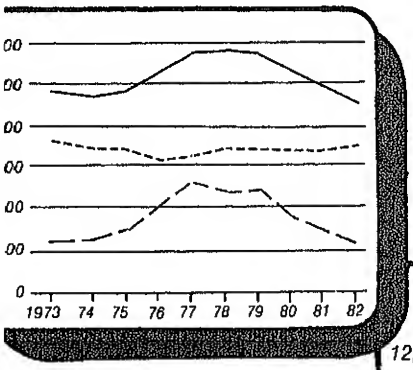

nnual

Monthly

[1] Liquefied Petroleum Gases

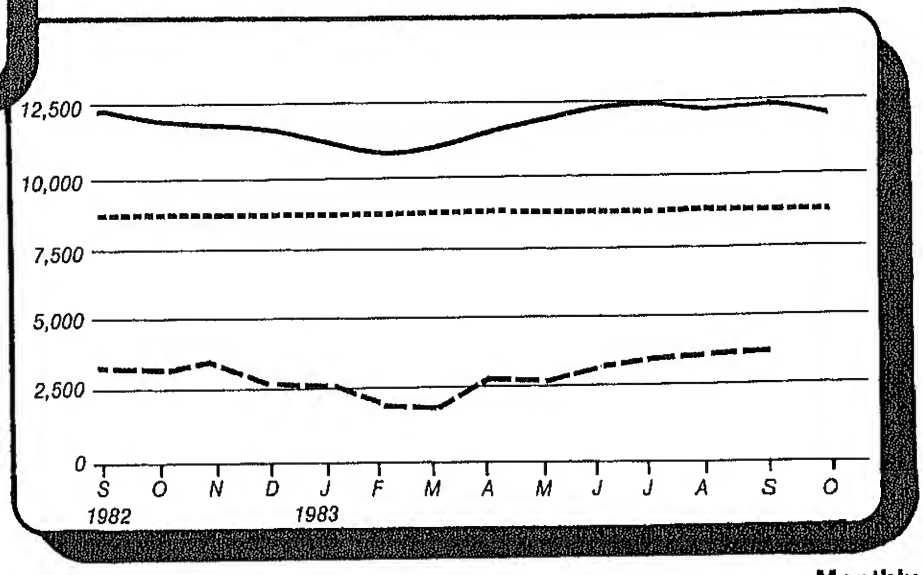
## ıde Oil Supply and Disposition

ɔusand Barrels Per Day)




ıual

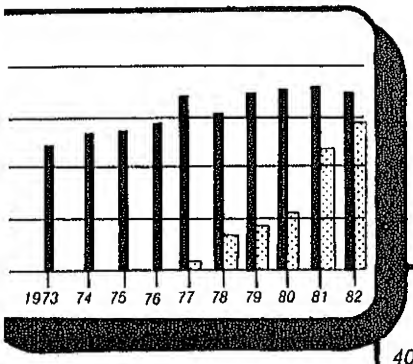
ɔludes SPR Imports




Monthly

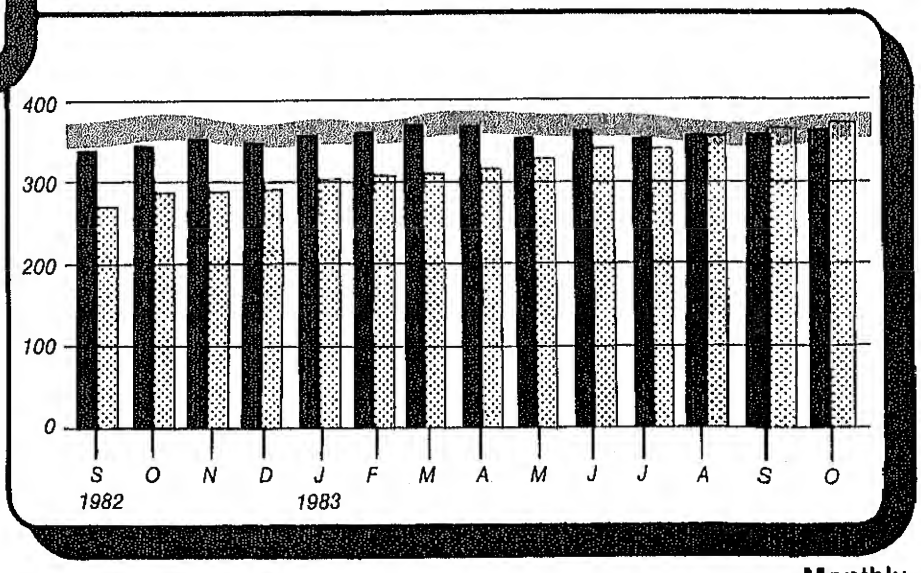
## ıde Oil Ending Stocks

lions of Barrels)




ıual

el and width of Average Stock ɟes for crude oil is based on 3 s of data, July 80-July 83. See anatory Note 6.




Monthly

## Crude Oil[1] Supply and Disposition

| | Supply | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Field Production | | Imports | | | Stock Withdrawal[2] | | |
| | Total Domestic | Alaskan | Total | SPR[3] | Other | SPR[3] | Other | Unaccounted for Crude Oil |
| | Thousand Barrels per Day | | | | | | | |
| 1973 AVERAGE | 9,208 | 198 | 3,244 | | 3,244 | | 11 | 3 |
| 1974 AVERAGE | 8,774 | 193 | 3,477 | | 3,477 | | -62 | -25 |
| 1975 AVERAGE | 8,375 | 191 | 4,105 | | 4,105 | | -17 | 17 |
| 1976 AVERAGE | 8,132 | 173 | 5,287 | | 5,287 | | -39 | 77 |
| 1977 AVERAGE | 8,245 | 464 | 6,615 | 21 | 6,594 | -20 | -150 | -6 |
| 1978 AVERAGE | 8,707 | 1,229 | 6,356 | 162 | 6,195 | -163 | 84 | -57 |
| 1979 AVERAGE | 8,552 | 1,401 | 6,519 | 67 | 6,452 | -67 | -81 | -11 |
| 1980 AVERAGE | 8,597 | 1,617 | 5,263 | 44 | 5,219 | -45 | -52 | 34 |
| 1981 January | 8,540 | 1,606 | 4,932 | 106 | 4,826 | -151 | 201 | 113 |
| February | 8,604 | 1,619 | 4,873 | 80 | 4,793 | -127 | -150 | -41 |
| March | 8,613 | 1,618 | 4,521 | 140 | 4,382 | -155 | -477 | 154 |
| April | 8,557 | 1,608 | 4,338 | 272 | 4,066 | -444 | -151 | 51 |
| May | 8,501 | 1,580 | 4,287 | 386 | 3,901 | -513 | 122 | 286 |
| June | 8,629 | 1,632 | 4,061 | 318 | 3,743 | -434 | 299 | 49 |
| July | 8,500 | 1,605 | 4,296 | 175 | 4,121 | -324 | -36 | 147 |
| August | 8,583 | 1,602 | 4,179 | 257 | 3,922 | -372 | 769 | 16 |
| September | 8,604 | 1,607 | 4,740 | 435 | 4,305 | -486 | 201 | -295 |
| October | 8,563 | 1,596 | 4,380 | 453 | 3,927 | -501 | -259 | 166 |
| November | 8,586 | 1,614 | 4,046 | 271 | 3,774 | -259 | -66 | 279 |
| December | 8,585 | 1,623 | 4,137 | 165 | 3,971 | -252 | 82 | 52 |
| AVERAGE | 8,572 | 1,609 | 4,396 | 256 | 4,141 | -336 | 46 | 83 |
| 1982 January | 8,509 | 1,705 | 3,693 | 170 | 3,523 | -159 | -242 | 101 |
| February | 8,702 | 1,707 | 2,990 | 159 | 2,830 | -213 | -29 | 156 |
| March | 8,667 | 1,696 | 2,874 | 185 | 2,689 | -235 | 357 | 2 |
| April | 8,591 | 1,691 | 2,849 | 190 | 2,659 | -233 | 196 | 231 |
| May | 8,683 | 1,707 | 3,309 | 204 | 3,105 | -176 | 205 | 111 |
| June | 8,646 | 1,665 | 3,836 | 105 | 3,732 | -105 | 144 | 133 |
| July | 8,658 | 1,710 | 4,248 | 97 | 4,150 | -97 | -50 | -20 |
| August | 8,634 | 1,697 | 3,851 | 208 | 3,643 | -208 | -232 | 189 |
| September | 8,701 | 1,705 | 3,636 | 139 | 3,497 | -143 | 406 | -210 |
| October | 8,701 | 1,706 | 3,670 | 216 | 3,454 | -216 | -332 | 249 |
| November | 8,697 | 1,676 | 3,862 | 180 | 3,683 | -179 | -219 | -124 |
| December | 8,598 | 1,682 | 3,000 | 124 | 2,877 | -125 | 252 | 35 |
| AVERAGE | 8,649 | 1,696 | 3,488 | 165 | 3,323 | -174 | 38 | 71 |
| 1983 January | 8,634 | 1,698 | 2,938 | 219 | 2,720 | -219 | -348 | 238 |
| February | 8,660 | 1,725 | 2,268 | 197 | 2,071 | -197 | -185 | 423 |
| March | 8,677 | 1,726 | 2,232 | 201 | 2,031 | -184 | 240 | 134 |
| April | 8,686 | 1,710 | 3,154 | 205 | 2,949 | -197 | -241 | 191 |
| May | 8,682 | 1,710 | 3,234 | 289 | 2,945 | -293 | 362 | 148 |
| June | 8,676 | 1,710 | 3,502 | 190 | 3,312 | -188 | 25 | 480 |
| July | 8,647 | 1,705 | 3,868 | 274 | 3,594 | -264 | 382 | -74 |
| August | 8,653 | 1,712 | 4,174 | 350 | 3,823 | -358 | -423 | 333 |
| September* | 8,666 | 1,722 | R 4,221 | R 309 | R 3,912 | R -307 | R 116 | -6 |
| October** | 8,654 | 1,731 | *3,785* | *213* | *3,572* | *-220* | *-50* | NA |
| AVERAGE | 8,663 | 1,715 | 3,345 | 245 | 3,100 | -243 | -10 | NA |

[1] Includes lease condensate.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Strategic Petroleum Reserve.
Totals may not equal sum of components due to independent rounding.
NA = Not available. R = Revised data.
* See Explanatory Note 9.2.
** Italics denote preliminary data. See Explanatory Note 8.
Note: Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

## Crude Oil[1] Supply and Disposition ( continued )

| | Supply | Disposition | | | | Ending Stocks[2] | | |
|---|---|---|---|---|---|---|---|---|
| | Crude Used Directly[3] | Crude Losses | Refinery Inputs | Exports | Product Supplied[3] | Total Crude Oil | SPR[4] | Other Primary |
| | Thousand Barrels per Day | | | | | Million Barrels | | |
| **1973 AVERAGE** | **-19** | **13** | **12,431** | **2** | **NA** | **242** | | **242** |
| **1974 AVERAGE** | **-15** | **13** | **12,133** | **3** | **NA** | **[5] 265** | | **[5] 265** |
| **1975 AVERAGE** | **-17** | **13** | **12,442** | **6** | **NA** | **271** | | **271** |
| **1976 AVERAGE** | **-18** | **15** | **13,416** | **8** | **NA** | **285** | | **285** |
| **1977 AVERAGE** | **-14** | **16** | **14,602** | **50** | **NA** | **348** | **7** | **340** |
| **1978 AVERAGE** | **-14** | **16** | **14,739** | **158** | **NA** | **376** | **67** | **309** |
| **1979 AVERAGE** | **-13** | **16** | **14,648** | **235** | **NA** | **430** | **91** | **339** |
| **1980 AVERAGE** | **-13** | **15** | **13,481** | **287** | **NA** | **[5] 466** | **108** | **[5] 358** |
| **1981** January | -43 | 6 | 13,247 | 339 | NA | 486 | 112 | 374 |
| February | -55 | 3 | 12,902 | 198 | NA | 494 | 116 | 378 |
| March | -57 | 6 | 12,383 | 210 | NA | 514 | 121 | 393 |
| April | -59 | 3 | 12,091 | 198 | NA | 532 | 134 | 397 |
| May | -59 | 3 | 12,309 | 312 | NA | 544 | 150 | 394 |
| June | -58 | 7 | 12,415 | 123 | NA | 548 | 163 | 385 |
| July | -58 | 7 | 12,261 | 257 | NA | 559 | 173 | 386 |
| August | -58 | 5 | 12,908 | 204 | NA | 547 | 185 | 362 |
| September | -61 | 4 | 12,505 | 194 | NA | 555 | 199 | 356 |
| October | -63 | 3 | 12,057 | 226 | NA | 579 | 215 | 364 |
| November | -64 | 4 | 12,240 | 278 | NA | 589 | 223 | 366 |
| December | -63 | 4 | 12,349 | 189 | NA | 594 | 230 | 363 |
| **AVERAGE** | **-58** | **5** | **12,470** | **228** | **NA** | | | |
| **1982** January | -63 | 3 | 11,599 | 238 | NA | 606 | 235 | 371 |
| February | -64 | 2 | 11,236 | 304 | NA | 613 | 241 | 372 |
| March | -63 | 5 | 11,276 | 321 | NA | 609 | 249 | 361 |
| April | -65 | 3 | 11,392 | 174 | NA | 610 | 256 | 355 |
| May | -62 | 3 | 11,806 | 262 | NA | 609 | 261 | 348 |
| June | -60 | 7 | 12,494 | 94 | NA | 608 | 264 | 344 |
| July | -60 | 3 | 12,446 | 229 | NA | 613 | 267 | 346 |
| August | -57 | 2 | 11,871 | 304 | NA | 626 | 274 | 353 |
| September | -56 | 4 | 12,146 | 184 | NA | 619 | 278 | 341 |
| October | -51 | 2 | 11,749 | 270 | NA | 636 | 285 | 351 |
| November | -51 | 1 | 11,724 | 262 | NA | 648 | 290 | 358 |
| December | -53 | 1 | 11,514 | 193 | NA | [5] 644 | 294 | [5] 350 |
| **AVERAGE** | **-59** | **3** | **11,774** | **236** | **NA** | | | |
| **1983** January | NA | 2 | 11,070 | 117 | 54 | 661 | 301 | 361 |
| February | NA | 3 | 10,635 | 262 | 69 | 672 | 306 | 366 |
| March | NA | 2 | 10,854 | 174 | 70 | 670 | 312 | 359 |
| April | NA | 2 | 11,436 | 88 | 68 | 684 | 318 | 366 |
| May | NA | 1 | 11,789 | 280 | 63 | 681 | 327 | 355 |
| June | NA | 1 | 12,287 | 144 | 64 | 686 | 332 | 354 |
| July | NA | 2 | 12,347 | 145 | 65 | 683 | 341 | 342 |
| August | NA | 1 | 12,141 | 172 | 64 | 707 | 352 | 355 |
| September* | NA | 1 | R 12,445 | 177 | 66 | R 713 | R 361 | R 352 |
| October** | NA | NA | *11,779* | NA | NA | *720* | *367* | *353* |
| **AVERAGE** | **NA** | **NA** | **11,685** | **NA** | **NA** | | | |

1 Includes lease condensate.
2 Stocks are totals as of end of period.
3 Beginning in January 1983, crude oil used directly as fuel is presented as product supplied for crude oil. Prior to January 1983 crude oil used directly was included with crude oil losses in this table and with product supplied for distillate and residual fuel oils.
4 Strategic Petroleum Reserve.
5 In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis) end of year stocks would be: 1974-265, 1980-483 (Total) and 375 (Other primary), and 1982-644 (Total) and 350 (Other Primary).

Totals may not equal sum of components due to independent rounding.
NA = Not available. R = Revised data.
* See Explanatory Note 9.2.
** Italics denote preliminary data. See Explanatory Note 8.
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

## Finished Motor Gasoline Supply and Disposition

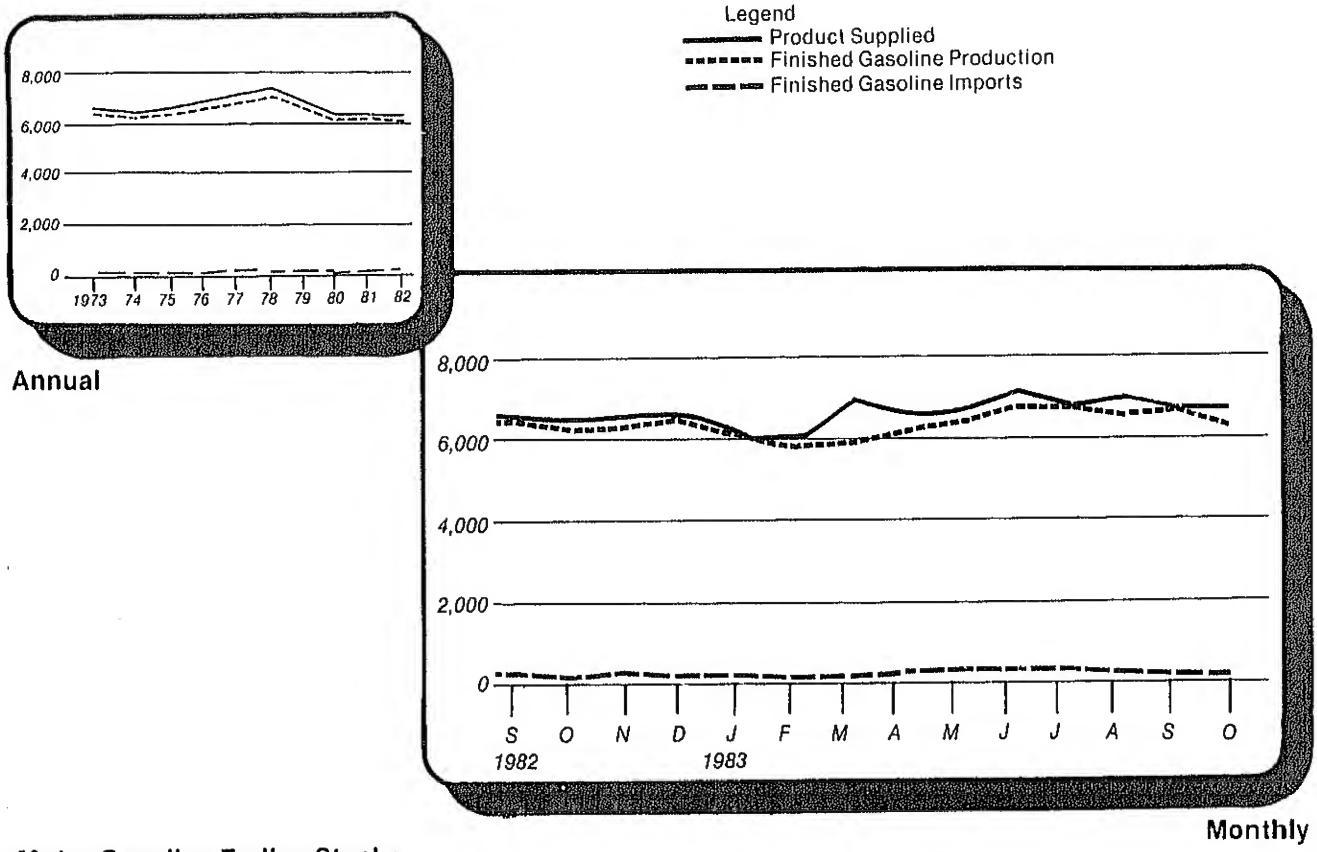
| | Supply | | | Disposition | | | | Ending Stocks[1] | |
|---|---|---|---|---|---|---|---|---|---|
| | Total Production | Imports[2] | Stock Withdrawal[2,3] | Exports | Product Supplied: Total | Product Supplied: Unleaded[5] | Unleaded: Percent of Total | Total Motor Gasoline[4] | Finished Motor Gasoline |
| | Thousand Barrels per Day | | | | | | | Million Barrels | |
| 1973 AVERAGE | 6,535 | 134 | 9 | 4 | 6,674 | NA | NA | 209 | |
| 1974 AVERAGE | 6,360 | 204 | -24 | 2 | 6,537 | NA | NA | [6] 218 | |
| 1975 AVERAGE | 6,520 | 184 | -28 | 2 | 6,675 | NA | NA | 235 | |
| 1976 AVERAGE | 6,841 | 131 | 10 | 3 | 6,978 | NA | NA | 231 | |
| 1977 AVERAGE | 7,033 | 217 | -72 | 2 | 7,177 | 1,976 | 27.5 | 258 | |
| 1978 AVERAGE | 7,169 | 190 | 54 | 1 | 7,412 | 2,521 | 34.0 | 238 | |
| 1979 AVERAGE | 6,852 | 181 | 2 | (s) | 7,034 | 2,798 | 39.8 | 237 | |
| 1980 AVERAGE | 6,506 | 140 | -66 | 1 | 6,579 | 3,067 | 46.6 | [6] 261 | |
| 1981 January | 6,715 | 138 | -421 | (s) | 6,431 | 3,141 | 48.8 | 276 | 227 |
| February | 6,308 | 111 | -118 | 1 | 6,301 | 3,095 | 49.1 | 284 | 230 |
| March | 6,213 | 171 | -81 | (s) | 6,303 | 3,097 | 49.1 | 285 | 232 |
| April | 6,114 | 186 | 303 | (s) | 6,602 | 3,284 | 49.7 | 272 | 223 |
| May | 6,122 | 150 | 344 | 1 | 6,615 | 3,115 | 47.1 | 259 | 213 |
| June | 6,220 | 186 | 622 | 1 | 7,028 | 3,419 | 48.6 | 242 | 194 |
| July | 6,405 | 151 | 268 | (s) | 6,823 | 3,424 | 50.2 | 228 | 186 |
| August | 6,611 | 124 | -95 | 3 | 6,637 | 3,344 | 50.4 | 233 | 189 |
| September | 6,564 | 169 | -70 | 2 | 6,662 | 3,338 | 50.1 | 237 | 191 |
| October | 6,426 | 147 | 7 | 3 | 6,578 | 3,257 | 49.5 | 236 | 190 |
| November | 6,564 | 148 | -338 | 1 | 6,373 | 3,198 | 50.2 | 248 | 201 |
| December | 6,586 | 197 | -91 | 11 | 6,681 | 3,444 | 51.5 | 253 | 203 |
| AVERAGE | 6,405 | 157 | 28 | 2 | 6,588 | 3,264 | 49.5 | | |
| 1982 January | 6,167 | 128 | -316 | 18 | 5,961 | 3,067 | 51.5 | 261 | 213 |
| February | 5,899 | 133 | 172 | 8 | 6,196 | 3,210 | 51.8 | 257 | 208 |
| March | 5,994 | 183 | 334 | 44 | 6,466 | 3,358 | 51.9 | 247 | 198 |
| April | 6,095 | 185 | 650 | 33 | 6,897 | 3,495 | 50.7 | 221 | 179 |
| May | 6,319 | 182 | 177 | 23 | 6,655 | 3,415 | 51.3 | 214 | 173 |
| June | 6,754 | 230 | -134 | 14 | 6,835 | 3,565 | 52.2 | 219 | 177 |
| July | 6,768 | 225 | -178 | 24 | 6,790 | 3,577 | 52.7 | 226 | 183 |
| August | 6,419 | 291 | -81 | 16 | 6,614 | 3,526 | 53.3 | 227 | 185 |
| September | 6,527 | 223 | -198 | 22 | 6,531 | 3,404 | 52.1 | 234 | 191 |
| October | 6,262 | 185 | -42 | 15 | 6,391 | 3,351 | 52.4 | 234 | 192 |
| November | 6,273 | 211 | 101 | 11 | 6,574 | 3,451 | 52.5 | 230 | 189 |
| December | 6,542 | 178 | -165 | 7 | 6,549 | 3,485 | 53.2 | [6] 235 | [6] 194 |
| AVERAGE | 6,338 | 197 | 25 | 20 | 6,539 | 3,409 | 52.1 | | |
| 1983 January | 6,020 | 148 | -186 | (s) | 5,981 | 3,352 | 56.0 | 251 | 208 |
| February | 5,848 | 142 | 32 | (s) | 6,022 | 3,257 | 54.1 | 251 | 207 |
| March | 5,897 | 205 | 765 | 23 | 6,843 | 3,620 | 52.9 | 224 | 184 |
| April | 6,202 | 273 | 27 | 1 | 6,501 | 3,505 | 53.9 | 221 | 183 |
| May | 6,386 | 284 | -128 | 1 | 6,540 | 3,547 | 54.2 | 225 | 187 |
| June | 6,646 | 265 | 118 | 22 | 7,008 | 3,796 | 54.2 | 223 | 183 |
| July | 6,704 | 297 | -210 | 18 | 6,773 | 3,752 | 55.4 | 231 | 190 |
| August | 6,539 | 260 | 159 | 13 | 6,946 | 3,836 | 55.2 | 226 | 185 |
| September* | R 6,582 | R 285 | R -160 | 14 | R 6,693 | 3,671 | 54.8 | R 230 | R 190 |
| October** | *6,245* | *287* | *203* | NA | *6,719* | NA | NA | *222* | *185* |
| AVERAGE | 6,310 | 245 | 63 | NA | 6,607 | NA | NA | | |

[1] Stocks are totals as of end of period.
[2] Beginning in 1981, excludes blending components.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] Includes motor gasoline blending components.
[5] Includes gasohol.
[6] In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-225, 1980-263, 1982-244 (Total) and 203 (Finished). Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.

(s) = Less than 500 barrels per day. NA = Not available. R = Revised data.
* See Explanatory Note 9.3.
** Italics denote preliminary data. See Explanatory Note 8.
Note: Beginning in January 1981, survey forms were modified .
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

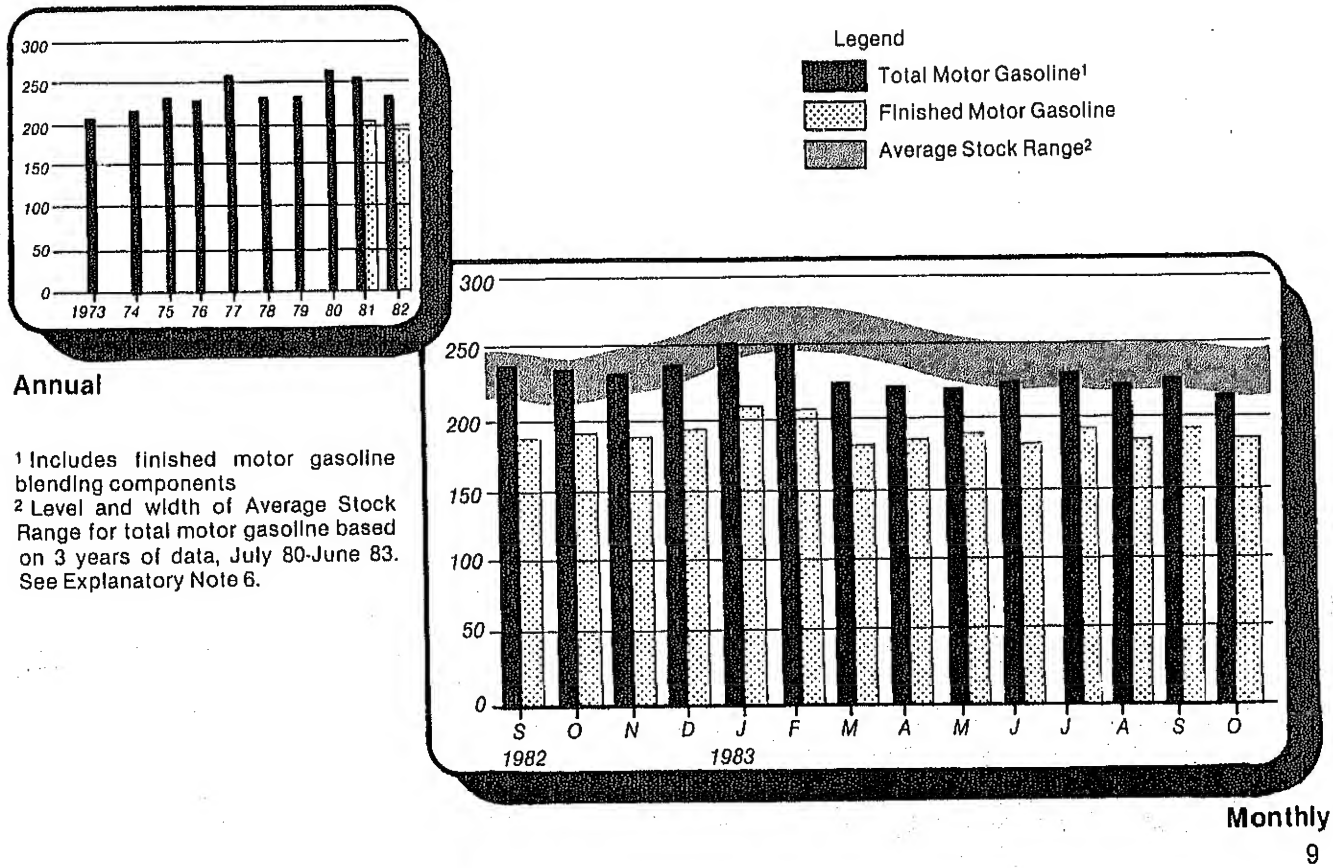
## Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)




## Motor Gasoline Ending Stocks

(Millions of Barrels)




1 Includes finished motor gasoline blending components

2 Level and width of Average Stock Range for total motor gasoline based on 3 years of data, July 80-June 83. See Explanatory Note 6.

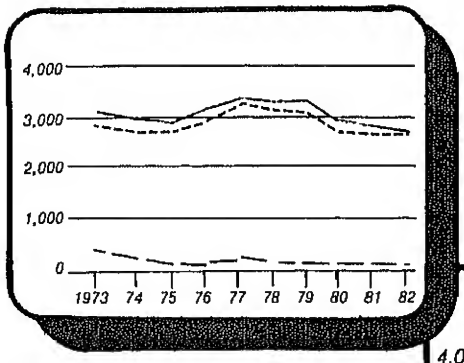
## Distillate Fuel Oil Supply and Disposition

| | Supply | | | | Disposition | | Ending Stocks[1] |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal[2] | Crude Used Directly[3] | Exports | Product Supplied[3] | |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 AVERAGE | 2,822 | 392 | -115 | 2 | 9 | 3,092 | 196 |
| 1974 AVERAGE | 2,669 | 289 | -9 | 2 | 2 | 2,948 | [4] 200 |
| 1975 AVERAGE | 2,654 | 155 | 40 | 2 | 1 | 2,851 | 209 |
| 1976 AVERAGE | 2,924 | 146 | 62 | 1 | 1 | 3,133 | 186 |
| 1977 AVERAGE | 3,278 | 250 | -176 | 1 | 1 | 3,352 | 250 |
| 1978 AVERAGE | 3,167 | 173 | 93 | 1 | 3 | 3,432 | 216 |
| 1979 AVERAGE | 3,153 | 193 | -34 | 1 | 3 | 3,311 | 229 |
| 1980 AVERAGE | 2,662 | 142 | 64 | 1 | 3 | 2,866 | [4] 205 |
| 1981 January | 2,989 | 273 | 836 | 11 | (s) | 4,109 | 179 |
| February | 2,809 | 325 | 246 | 11 | 17 | 3,373 | 173 |
| March | 2,484 | 147 | 264 | 9 | (s) | 2,904 | 164 |
| April | 2,418 | 116 | -9 | 10 | 3 | 2,532 | 165 |
| May | 2,454 | 179 | -232 | 10 | (s) | 2,411 | 172 |
| June | 2,501 | 225 | -270 | 9 | (s) | 2,464 | 180 |
| July | 2,395 | 179 | -204 | 10 | 2 | 2,378 | 186 |
| August | 2,656 | 174 | -450 | 8 | (s) | 2,388 | 200 |
| September | 2,610 | 129 | -235 | 10 | 1 | 2,513 | 207 |
| October | 2,485 | 119 | 197 | 9 | 5 | 2,803 | 201 |
| November | 2,716 | 124 | 36 | 11 | 6 | 2,880 | 200 |
| December | 2,856 | 95 | 277 | 11 | 26 | 3,212 | 192 |
| AVERAGE | 2,613 | 173 | 38 | 10 | 5 | 2,829 | |
| 1982 January | 2,591 | 97 | 876 | 10 | 90 | 3,484 | 164 |
| February | 2,427 | 132 | 605 | 11 | 90 | 3,085 | 147 |
| March | 2,288 | 48 | 682 | 10 | 84 | 2,945 | 126 |
| April | 2,358 | 59 | 612 | 13 | 64 | 2,978 | 108 |
| May | 2,618 | 74 | -183 | 10 | 75 | 2,444 | 114 |
| June | 2,729 | 102 | -335 | 10 | 55 | 2,452 | 124 |
| July | 2,734 | 125 | -789 | 11 | 24 | 2,058 | 148 |
| August | 2,507 | 80 | -339 | 10 | 40 | 2,218 | 159 |
| September | 2,657 | 61 | -85 | 12 | 139 | 2,507 | 161 |
| October | 2,838 | 91 | -289 | 8 | 66 | 2,581 | 170 |
| November | 2,860 | 145 | -514 | 8 | 24 | 2,475 | 186 |
| December | 2,655 | 109 | 225 | 10 | 143 | 2,855 | [4] 179 |
| AVERAGE | 2,606 | 93 | 35 | 10 | 74 | 2,671 | |
| 1983 January | 2,314 | 58 | 561 | NA | 173 | 2,760 | 168 |
| February | 2,136 | 58 | 742 | NA | 105 | 2,832 | 147 |
| March | 1,991 | 42 | 926 | NA | 59 | 2,900 | 119 |
| April | 2,169 | 73 | 518 | NA | 47 | 2,713 | 103 |
| May | 2,444 | 141 | -193 | NA | 50 | 2,341 | 109 |
| June | 2,545 | 175 | -154 | NA | 40 | 2,526 | 114 |
| July | 2,600 | 259 | -556 | NA | 55 | 2,248 | 131 |
| August | 2,612 | 302 | -403 | NA | 43 | 2,467 | 144 |
| September* | R 2,725 | R 253 | R -374 | NA | 37 | R 2,568 | R 155 |
| October** | *2,651* | *220* | *-244* | NA | NA | *2,576* | *162* |
| AVERAGE | 2,421 | 159 | 77 | NA | NA | 2,591 | |

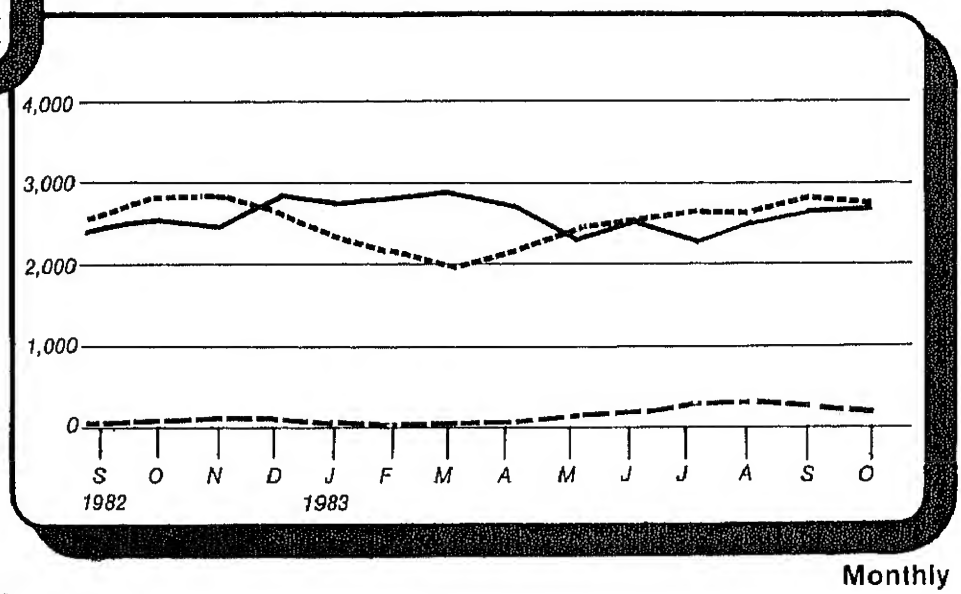
[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4.
[4] In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-224, 1980-205, and 1982-186. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
(s) = Less than 500 barrels per day. NA = Not available. R = Revised data.
Totals may not equal sum of components due to independent rounding.
* See Explanatory Note 9.4.
** Italics denote preliminary data. See Explanatory Note 8.
Note: Beginning in January 1981, survey forms were modified.
Geographic Coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

## Distillate Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



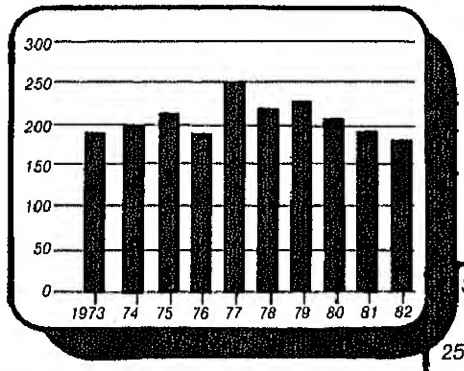

Annual



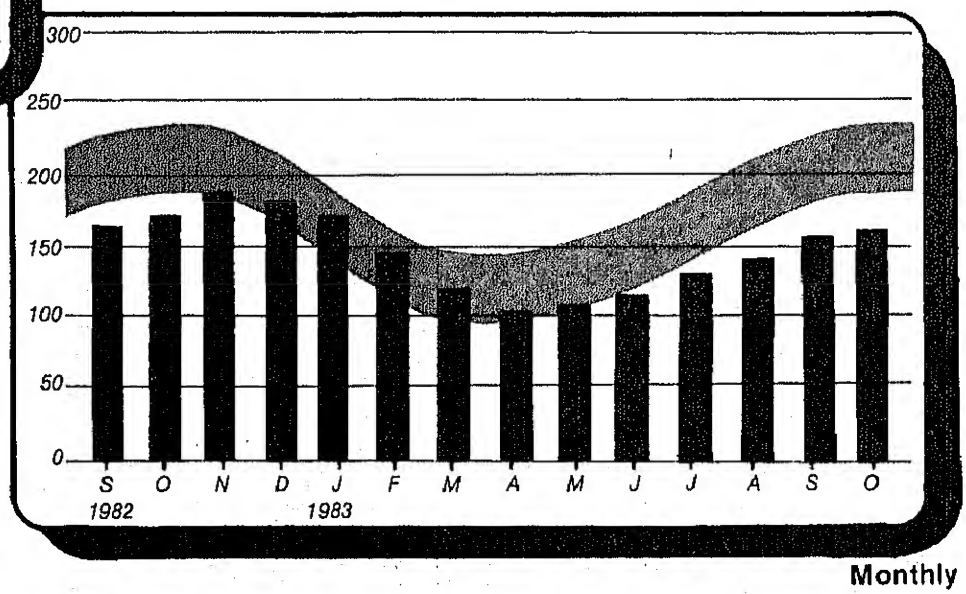

Monthly

## Distillate Fuel Oil Ending Stocks

(Millions of Barrels)




Annual




Monthly

¹ Level and width of Average Stock Range for distillate fuel oil is based on 3 years of data, July 80-July 83. See Explanatory Note 6.

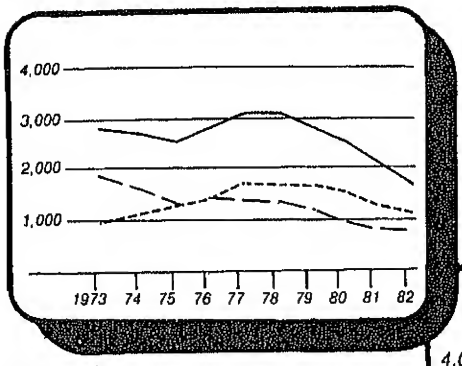
## Residual Fuel Oil Supply and Disposition

| | Supply | | | | Disposition | | Ending Stocks[1] |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal[2] | Crude Used Directly[3] | Exports | Product Supplied[3] | |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| **1973 AVERAGE** | **971** | **1,853** | **5** | **17** | **23** | **2,822** | **53** |
| **1974 AVERAGE** | **1,070** | **1,587** | **-17** | **13** | **14** | **2,639** | **[4] 60** |
| **1975 AVERAGE** | **1,235** | **1,223** | **2** | **15** | **15** | **2,462** | **74** |
| **1976 AVERAGE** | **1,377** | **1,413** | **5** | **17** | **12** | **2,801** | **72** |
| **1977 AVERAGE** | **1,754** | **1,359** | **-48** | **13** | **6** | **3,071** | **90** |
| **1978 AVERAGE** | **1,667** | **1,355** | **-1** | **13** | **13** | **3,023** | **90** |
| **1979 AVERAGE** | **1,687** | **1,151** | **-15** | **12** | **9** | **2,826** | **96** |
| **1980 AVERAGE** | **1,580** | **939** | **10** | **12** | **33** | **2,508** | **[4] 92** |
| **1981** January | 1,612 | 1,015 | 302 | 32 | 65 | 2,896 | 82 |
| February | 1,565 | 954 | 150 | 44 | 125 | 2,588 | 78 |
| March | 1,424 | 699 | 100 | 48 | 145 | 2,126 | 75 |
| April | 1,320 | 584 | 66 | 49 | 151 | 1,868 | 73 |
| May | 1,223 | 741 | -170 | 49 | 25 | 1,817 | 78 |
| June | 1,232 | 540 | 291 | 49 | 76 | 2,037 | 69 |
| July | 1,174 | 830 | 2 | 48 | 82 | 1,971 | 69 |
| August | 1,231 | 819 | -179 | 50 | 69 | 1,852 | 75 |
| September | 1,292 | 841 | -176 | 51 | 126 | 1,882 | 80 |
| October | 1,238 | 786 | 8 | 54 | 202 | 1,884 | 80 |
| November | 1,227 | 880 | -49 | 53 | 203 | 1,909 | 81 |
| December | 1,329 | 916 | 110 | 52 | 157 | 2,250 | 78 |
| **AVERAGE** | **1,321** | **800** | **37** | **48** | **118** | **2,088** | |
| **1982** January | 1,235 | 831 | 301 | 53 | 235 | 2,185 | 69 |
| February | 1,186 | 956 | 363 | 53 | 213 | 2,344 | 58 |
| March | 1,123 | 912 | 12 | 53 | 197 | 1,903 | 58 |
| April | 1,166 | 788 | 150 | 52 | 234 | 1,923 | 54 |
| May | 1,128 | 742 | -172 | 52 | 191 | 1,560 | 59 |
| June | 1,074 | 652 | -57 | 50 | 217 | 1,501 | 61 |
| July | 1,028 | 657 | 56 | 49 | 239 | 1,550 | 59 |
| August | 965 | 551 | 203 | 47 | 235 | 1,531 | 53 |
| September | 1,008 | 872 | -306 | 44 | 148 | 1,470 | 62 |
| October | 955 | 783 | -57 | 43 | 234 | 1,490 | 64 |
| November | 989 | 837 | -94 | 43 | 182 | 1,591 | 66 |
| December | 989 | 747 | 6 | 43 | 186 | 1,598 | [4] 66 |
| **AVERAGE** | **1,070** | **776** | **32** | **48** | **209** | **1,716** | |
| **1983** January | 935 | 691 | 243 | NA | 294 | 1,574 | 61 |
| February | 857 | 632 | 270 | NA | 191 | 1,568 | 53 |
| March | 833 | 686 | 220 | NA | 169 | 1,569 | 46 |
| April | 942 | 743 | -10 | NA | 310 | 1,364 | 47 |
| May | 930 | 709 | -139 | NA | 190 | 1,310 | 51 |
| June | 832 | 676 | 28 | NA | 219 | 1,317 | 50 |
| July | 771 | 682 | -58 | NA | 90 | 1,306 | 52 |
| August | 706 | 705 | 115 | NA | 165 | 1,362 | 48 |
| September* | R 815 | R 690 | R -47 | NA | 134 | R 1,324 | R 50 |
| October** | *785* | *652* | *-8* | NA | NA | *1,312* | *47* |
| **AVERAGE** | **840** | **687** | **60** | **NA** | **NA** | **1,400** | |

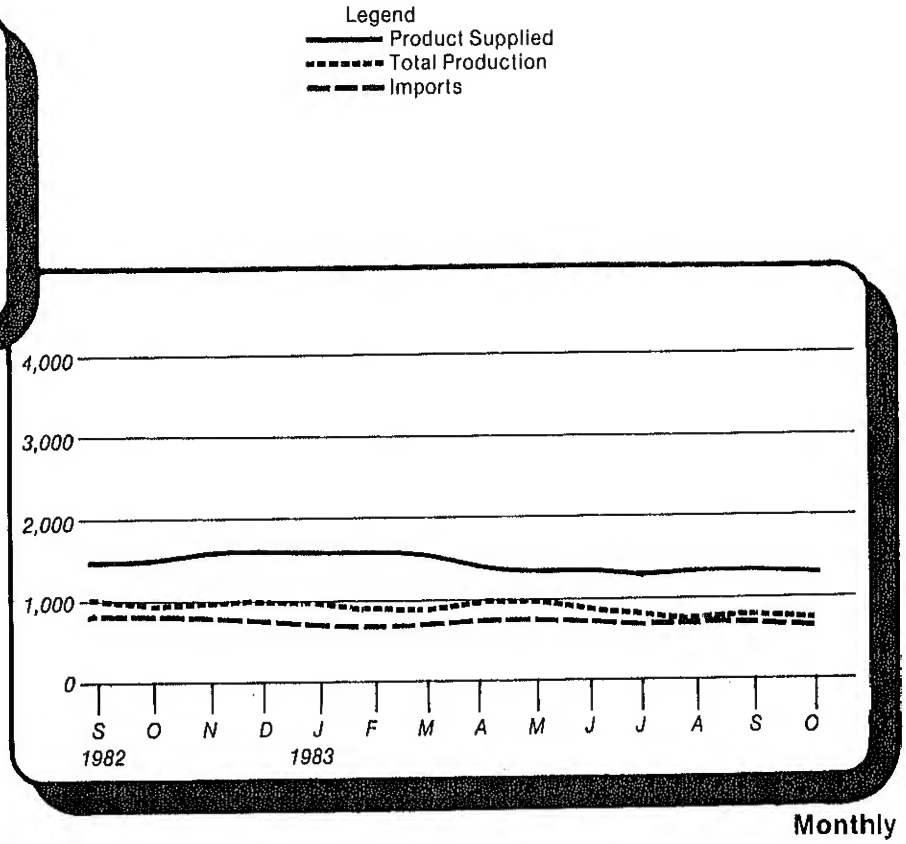
[1] Stocks are totals as of end of period.
[2] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[3] Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.
[4] In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-75, 1980-91, and 1982-68. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Totals may not equal sum of components due to independent rounding.
NA = Not available. R = Revised data.
* See Explanatory Note 9.4.
** Italics denote preliminary data. See Explanatory Note 8.
Note: Beginning in January 1981, survey forms were modified.
Geographic Coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

## Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



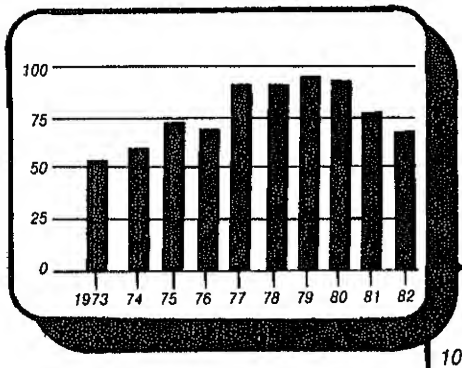

Annual

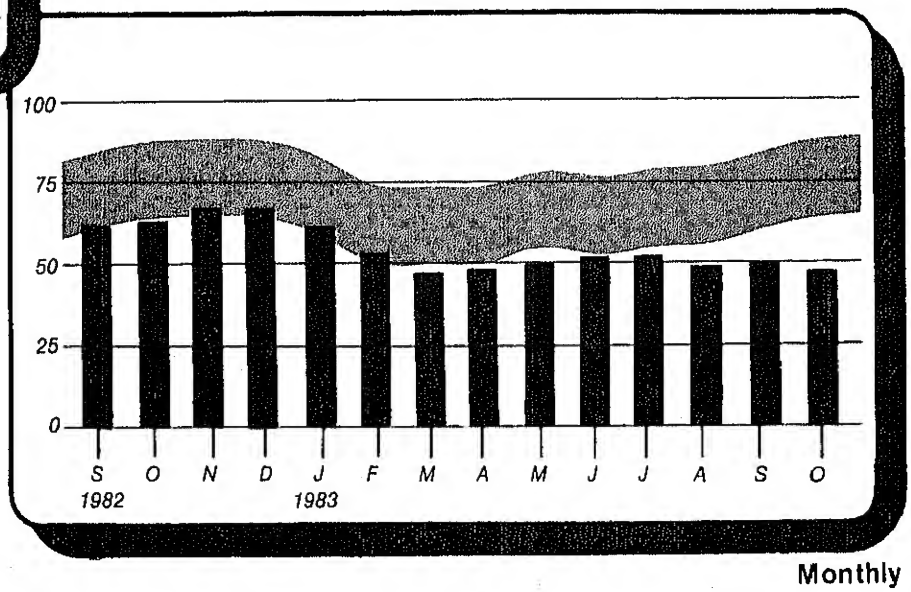



Monthly

## Residual Fuel Oil Ending Stocks

(Millions of Barrels)




Monthly

[1] Level and width of Average Stock Range for residual fuel oil based on 3 years of data, July 80-June 83. See Explanatory Note 6.

## Liquefied Petroleum Gases Supply and Disposition

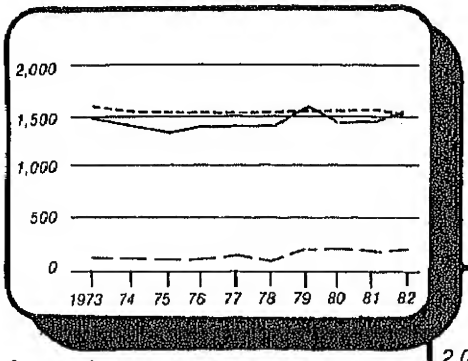
| | Supply | | | Disposition | | | Ending Stocks[1] |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal[2] | Refinery Inputs | Exports | Product Supplied | |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 AVERAGE | 1,600 | 132 | -35 | 220 | 27 | 1,449 | 99 |
| 1974 AVERAGE | 1,565 | 123 | -38 | 220 | 25 | 1,406 | [3] 113 |
| 1975 AVERAGE | 1,527 | 112 | -35 | 246 | 26 | 1,333 | 125 |
| 1976 AVERAGE | 1,535 | 130 | 24 | 260 | 25 | 1,404 | 116 |
| 1977 AVERAGE | 1,566 | 161 | -55 | 233 | 18 | 1,422 | 136 |
| 1978 AVERAGE | 1,537 | 123 | 12 | 239 | 20 | 1,413 | 132 |
| 1979 AVERAGE | 1,556 | 217 | 70 | 236 | 15 | 1,592 | 111 |
| 1980 AVERAGE | 1,535 | 216 | -27 | 233 | 21 | 1,469 | [3] 120 |
| 1981 January | 1,617 | 306 | 363 | 352 | 21 | 1,913 | 117 |
| February | 1,593 | 327 | 173 | 303 | 21 | 1,769 | 112 |
| March | 1,551 | 260 | -4 | 257 | 20 | 1,530 | 112 |
| April | 1,586 | 214 | -236 | 231 | 26 | 1,308 | 119 |
| May | 1,587 | 189 | -258 | 220 | 19 | 1,279 | 127 |
| June | 1,567 | 206 | -208 | 237 | 24 | 1,304 | 133 |
| July | 1,507 | 213 | -258 | 215 | 17 | 1,229 | 141 |
| August | 1,592 | 195 | -242 | 235 | 149 | 1,160 | 149 |
| September | 1,622 | 199 | -75 | 287 | 21 | 1,438 | 151 |
| October | 1,593 | 287 | 72 | 320 | 76 | 1,556 | 149 |
| November | 1,571 | 280 | 86 | 383 | 58 | 1,495 | 146 |
| December | 1,468 | 255 | 379 | 428 | 50 | 1,624 | 135 |
| AVERAGE | 1,571 | 244 | -18 | 289 | 42 | 1,466 | |
| 1982 January | 1,565 | 314 | 443 | 391 | 67 | 1,863 | 121 |
| February | 1,466 | 291 | 243 | 327 | 51 | 1,621 | 114 |
| March | 1,544 | 223 | 211 | 289 | 74 | 1,615 | 108 |
| April | 1,506 | 188 | 98 | 257 | 77 | 1,458 | 105 |
| May | 1,565 | 186 | -71 | 234 | 43 | 1,403 | 107 |
| June | 1,515 | 192 | -86 | 262 | 106 | 1,254 | 109 |
| July | 1,476 | 227 | -13 | 253 | 37 | 1,399 | 110 |
| August | 1,511 | 125 | -45 | 254 | 61 | 1,276 | 111 |
| September | 1,538 | 247 | 37 | 274 | 85 | 1,463 | 110 |
| October | 1,517 | 194 | 97 | 306 | 81 | 1,421 | 107 |
| November | 1,542 | 267 | 175 | 363 | 37 | 1,583 | 102 |
| December | 1,580 | 258 | 256 | 395 | 56 | 1,642 | [3] 94 |
| AVERAGE | 1,528 | 226 | 111 | 300 | 65 | 1,499 | |
| 1983 January | 1,662 | 240 | 618 | 313 | 118 | 2,088 | 84 |
| February | 1,560 | 305 | 84 | 237 | 76 | 1,636 | 81 |
| March | 1,517 | 166 | -51 | 189 | 127 | 1,316 | 83 |
| April | 1,531 | 124 | -107 | 198 | 116 | 1,232 | 86 |
| May | 1,545 | 167 | -326 | 207 | 84 | 1,094 | 96 |
| June | 1,593 | 172 | -333 | 205 | 59 | 1,169 | 106 |
| July | 1,571 | 191 | -206 | 217 | 55 | 1,284 | 112 |
| August | 1,505 | 160 | -183 | 229 | 29 | 1,225 | 118 |
| September* | 1,625 | 178 | -23 | 236 | 86 | 1,457 | 119 |
| AVERAGE | 1,568 | 188 | -59 | 226 | 83 | 1,387 | |

1 Stocks are totals as of end of period.
2 A negative number indicates an increase in stocks and a positive number indicates a decrease.
bers of new respondents were added to bulk
vestigation during the previous years.
withdrawals. Using the expanded
4-113, 1980-128, and 1982-103. Stock
using new basis stock levels.
nt rounding.

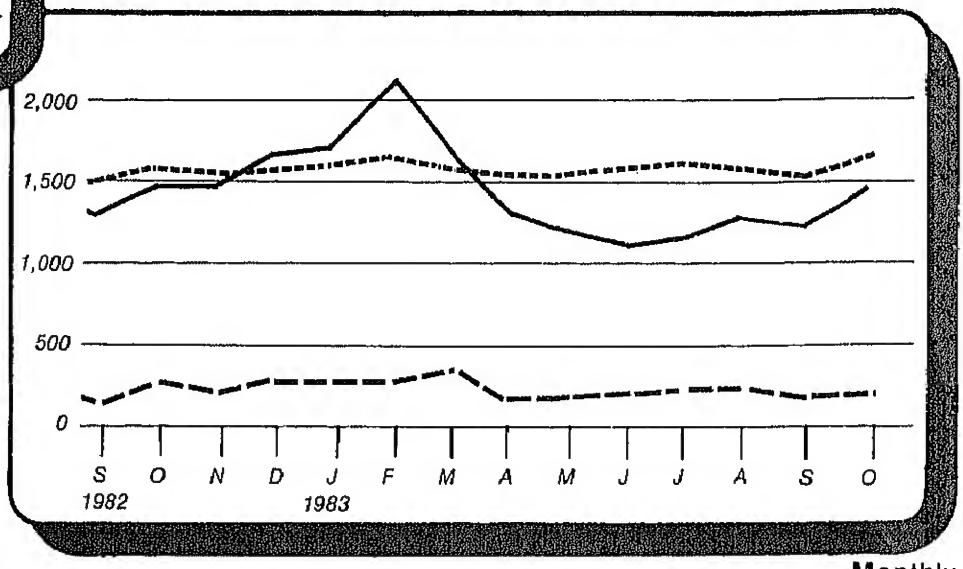
of Columbia.

## Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



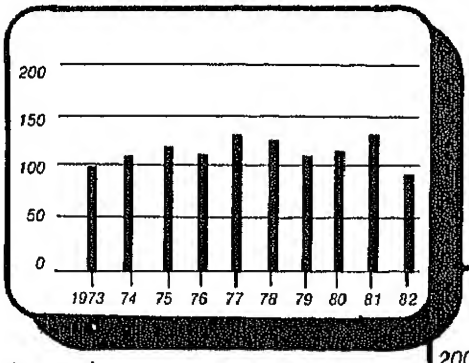

Annual



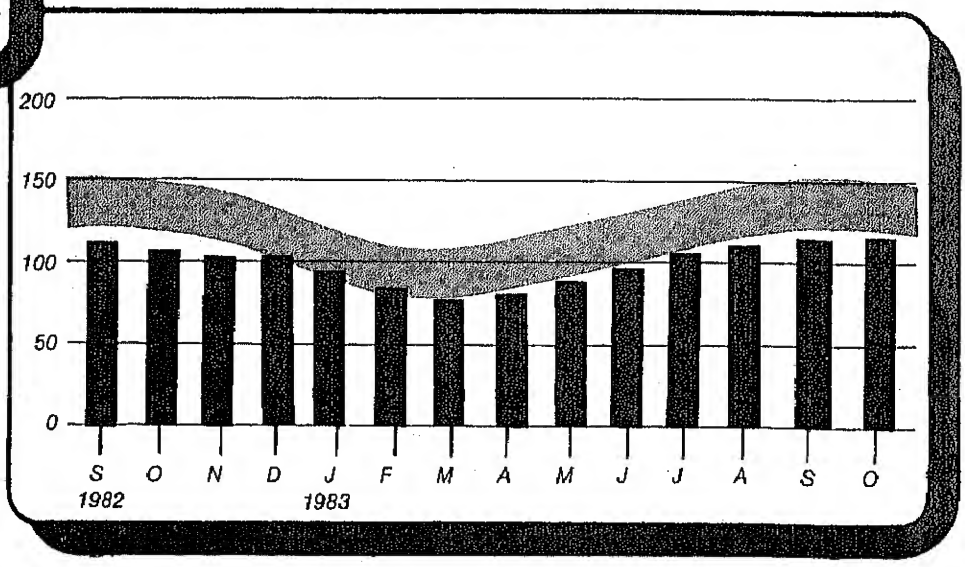

Monthly

## Liquefied Petroleum Gases Ending Stocks

(Millions of Barrels)




Annual




Monthly

[1] Level and width of Average Stock range for liquefied petroleum gases based on 3 years of data, July 80-June 83. See Explanatory Note 6.

## Other Petroleum Products[1] Supply and Disposition

| | Supply | | | Disposition | | | Ending Stocks[2] |
|---|---|---|---|---|---|---|---|
| | Total Production | Imports | Stock Withdrawal[3] | Refinery Inputs | Exports | Products Supplied | |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 AVERAGE | 3,693 | 502 | -9 | 750 | 166 | 3,270 | 208 |
| 1974 AVERAGE | 3,558 | 432 | -28 | 665 | 174 | 3,123 | [4] 218 |
| 1975 AVERAGE | 3,424 | 277 | -2 | 537 | 160 | 3,002 | 219 |
| 1976 AVERAGE | 3,643 | 206 | -5 | 524 | 175 | 3,145 | 220 |
| 1977 AVERAGE | 3,912 | 205 | -27 | 514 | 165 | 3,410 | 230 |
| 1978 AVERAGE | 4,046 | 166 | 14 | 492 | 167 | 3,568 | 225 |
| 1979 AVERAGE | 4,153 | 195 | -37 | 352 | 209 | 3,749 | 238 |
| 1980 AVERAGE | 3,956 | 210 | -23 | 311 | 198 | 3,634 | [4] 247 |
| 1981 January | 3,821 | 162 | 80 | 851 | 132 | 3,081 | 296 |
| February | 3,723 | 182 | -200 | 538 | 208 | 2,958 | 302 |
| March | 3,722 | 230 | -55 | 642 | 210 | 3,043 | 304 |
| April | 3,711 | 230 | 24 | 733 | 192 | 3,040 | 303 |
| May | 3,892 | 229 | -58 | 594 | 238 | 3,231 | 305 |
| June | 3,925 | 218 | -29 | 656 | 197 | 3,261 | 306 |
| July | 3,852 | 149 | 284 | 791 | 212 | 3,282 | 297 |
| August | 3,876 | 276 | -33 | 676 | 219 | 3,225 | 298 |
| September | 3,718 | 285 | 215 | 883 | 176 | 3,159 | 291 |
| October | 3,503 | 241 | 193 | 710 | 227 | 3,000 | 285 |
| November | 3,579 | 262 | 33 | 784 | 154 | 2,935 | 284 |
| December | 3,543 | 243 | 71 | 805 | 223 | 2,829 | 282 |
| AVERAGE | 3,739 | 226 | 46 | 723 | 199 | 3,088 | |
| 1982 January | 3,171 | 269 | -7 | 624 | 180 | 2,631 | 282 |
| February | 3,403 | 305 | -153 | 663 | 138 | 2,755 | 287 |
| March | 3,466 | 243 | -191 | 725 | 161 | 2,631 | 293 |
| April | 3,408 | 309 | 73 | 796 | 204 | 2,790 | 290 |
| May | 3,317 | 318 | 184 | 824 | 210 | 2,785 | 285 |
| June | 3,547 | 315 | 123 | 812 | 216 | 2,954 | 281 |
| July | 3,660 | 408 | -1 | 856 | 187 | 3,023 | 281 |
| August | 3,583 | 346 | 217 | 743 | 202 | 3,201 | 274 |
| September | 3,533 | 375 | 105 | 749 | 213 | 3,051 | 271 |
| October | 3,529 | 383 | 244 | 915 | 266 | 2,976 | 264 |
| November | 3,498 | 423 | -28 | 837 | 269 | 2,786 | 264 |
| December | 3,324 | 313 | 366 | 885 | 275 | 2,842 | [4] 253 |
| AVERAGE | 3,453 | 334 | 80 | 787 | 211 | 2,869 | |
| 1983 January | 3,222 | 297 | -371 | 570 | 271 | 2,307 | 271 |
| February | 3,270 | 287 | -1 | 680 | 232 | 2,645 | 271 |
| March | 3,400 | 298 | -94 | 570 | 249 | 2,786 | 273 |
| April | 3,363 | 377 | 3 | 596 | 247 | 2,901 | 273 |
| May | 3,448 | 364 | 26 | 694 | 242 | 2,902 | 273 |
| June | 3,674 | 427 | 99 | 715 | 292 | 3,197 | 270 |
| July | 3,703 | 393 | 106 | 757 | 209 | 3,237 | 266 |
| August | 3,774 | 435 | 23 | 689 | 242 | 3,302 | 266 |
| September* | 3,861 | 460 | -31 | 768 | 236 | 3,287 | 267 |
| AVERAGE | 3,526 | 371 | -27 | 671 | 246 | 2,978 | |

[1] Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases.
[2] Stocks are totals as of end of period.
[3] A negative number indicates an increase in stocks and a positive number indicates a decrease.
[4] In January 1975, 1981, and 1983, significant numbers of new respondents were added to bulk terminal and pipeline surveys as a result of extensive investigation during the previous years. The major impact is on the reporting of stocks and stock withdrawals. Using the expanded coverage (new basis), end of year stocks would be: 1974-220, 1980-249, and 1982-259. Stock withdrawals during 1975, 1981, and 1983 are calculated using new basis stock levels.
Totals may not equal sum of components due to independent rounding.
* See Explanatory Note 9.6.
Geographic Coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

## Crude Oil and Petroleum Product Imports from OPEC Sources[1]

| | Algeria | Libya | Saudi Arabia | United Arab Emirates | Indonesia | Iran | Nigeria | Venezuela | Other OPEC[2] | Total OPEC | Total Arab OPEC[3] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Barrels per Day | | | | | | | | | | |
| **1973 AVERAGE** | **136** | **164** | **486** | **71** | **213** | **223** | **459** | **1,135** | **106** | **2,993** | **915** |
| **1974 AVERAGE** | **190** | **4** | **461** | **74** | **300** | **469** | **713** | **979** | **88** | **3,280** | **752** |
| **1975 AVERAGE** | **282** | **232** | **715** | **117** | **390** | **280** | **762** | **702** | **122** | **3,601** | **1,383** |
| **1976 AVERAGE** | **432** | **453** | **1,230** | **254** | **539** | **298** | **1,025** | **700** | **134** | **5,066** | **2,424** |
| **1977 AVERAGE** | **559** | **723** | **1,380** | **335** | **541** | **535** | **1,143** | **690** | **287** | **6,193** | **3,185** |
| **1978 AVERAGE** | **649** | **654** | **1,144** | **385** | **573** | **555** | **919** | **645** | **226** | **5,751** | **2,963** |
| **1979 AVERAGE** | **636** | **658** | **1,356** | **281** | **420** | **304** | **1,080** | **690** | **212** | **5,637** | **3,056** |
| **1980 AVERAGE** | **488** | **554** | **1,261** | **172** | **348** | **9** | **857** | **481** | **130** | **4,300** | **2,551** |
| **1981** January | 341 | 500 | 1,284 | 93 | 424 | 0 | 908 | 549 | 27 | 4,127 | 2,219 |
| February | 381 | 468 | 1,122 | 93 | 406 | 0 | 866 | 463 | 92 | 3,891 | 2,064 |
| March | 352 | 485 | 1,027 | 47 | 328 | 0 | 771 | 360 | 54 | 3,425 | 1,912 |
| April | 263 | 485 | 1,034 | 68 | 307 | 0 | 812 | 237 | 39 | 3,245 | 1,867 |
| May | 393 | 443 | 933 | 17 | 297 | 0 | 664 | 331 | 124 | 3,203 | 1,796 |
| June | 356 | 380 | 865 | 60 | 367 | 0 | 528 | 248 | 118 | 2,922 | 1,703 |
| July | 333 | 251 | 1,073 | 80 | 340 | 0 | 651 | 466 | 38 | 3,233 | 1,757 |
| August | 348 | 274 | 1,082 | 61 | 377 | 0 | 321 | 523 | 84 | 3,070 | 1,765 |
| September | 336 | 154 | 1,477 | 96 | 371 | 0 | 323 | 359 | 149 | 3,264 | 2,063 |
| October | 242 | 147 | 1,342 | 90 | 427 | 0 | 412 | 389 | 172 | 3,220 | 1,820 |
| November | 210 | 132 | 1,270 | 112 | 353 | 0 | 517 | 535 | 56 | 3,184 | 1,724 |
| December | 176 | 122 | 1,045 | 158 | 400 | 0 | 684 | 411 | 132 | 3,129 | 1,502 |
| **AVERAGE** | **311** | **319** | **1,129** | **81** | **366** | **0** | **620** | **406** | **90** | **3,323** | **1,848** |
| **1982** January | 254 | 161 | 877 | 111 | 289 | 0 | 663 | 376 | 128 | 2,859 | 1,403 |
| February | 139 | 92 | 693 | 89 | 244 | 0 | 584 | 355 | 102 | 2,297 | 1,054 |
| March | 91 | 37 | 555 | 155 | 200 | 0 | 522 | 399 | 91 | 2,051 | 860 |
| April | 85 | 0 | 511 | 122 | 215 | 0 | 427 | 426 | 85 | 1,871 | 740 |
| May | 179 | 0 | 601 | 116 | 236 | 0 | 222 | 422 | 54 | 1,830 | 897 |
| June | 115 | 0 | 593 | 94 | 215 | 72 | 537 | 361 | 110 | 2,096 | 820 |
| July | 159 | 0 | 660 | 108 | 327 | 69 | 910 | 356 | 95 | 2,685 | 965 |
| August | 181 | 0 | 489 | 133 | 271 | 27 | 574 | 299 | 133 | 2,107 | 818 |
| September | 179 | 0 | 432 | 57 | 191 | 21 | 477 | 518 | 69 | 1,943 | 677 |
| October | 249 | 7 | 494 | 61 | 242 | 108 | 313 | 504 | 106 | 2,084 | 810 |
| November | 247 | 14 | 489 | 47 | 283 | 34 | 479 | 528 | 115 | 2,235 | 797 |
| December | 155 | 0 | 237 | 12 | 265 | 88 | 462 | 399 | 73 | 1,690 | 421 |
| **AVERAGE** | **170** | **26** | **552** | **92** | **248** | **35** | **514** | **412** | **97** | **2,146** | **854** |
| **1983** January | 204 | 0 | 282 | 47 | 255 | 43 | 186 | 324 | 43 | 1,384 | 533 |
| February | 104 | 0 | 214 | 9 | 217 | 0 | 92 | 371 | 28 | 1,035 | 326 |
| March | 63 | 0 | 103 | 0 | 138 | 0 | 121 | 425 | 173 | 1,023 | 183 |
| April | 228 | 0 | 180 | (s) | 210 | 0 | 186 | 508 | 125 | 1,438 | 409 |
| May | 284 | 0 | 122 | 12 | 324 | 37 | 352 | 444 | 69 | 1,645 | 419 |
| June | 300 | 0 | 175 | 40 | 502 | 38 | 402 | 335 | 146 | 1,938 | 515 |
| July | 282 | 0 | 182 | 58 | 464 | 112 | 525 | 431 | 187 | 2,240 | 599 |
| August | 370 | 0 | 426 | 45 | 416 | 213 | 464 | 477 | 230 | 2,641 | 866 |
| September | 413 | 0 | 587 | 21 | 516 | 86 | 324 | 472 | 208 | 2,627 | 1,074 |
| **AVERAGE** | **251** | **0** | **252** | **26** | **339** | **60** | **297** | **421** | **135** | **1,780** | **548** |

1 Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.
2 Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.
3 Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.
(s) Less than 500 barrels.
Totals may not equal sum of components due to independent rounding.
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

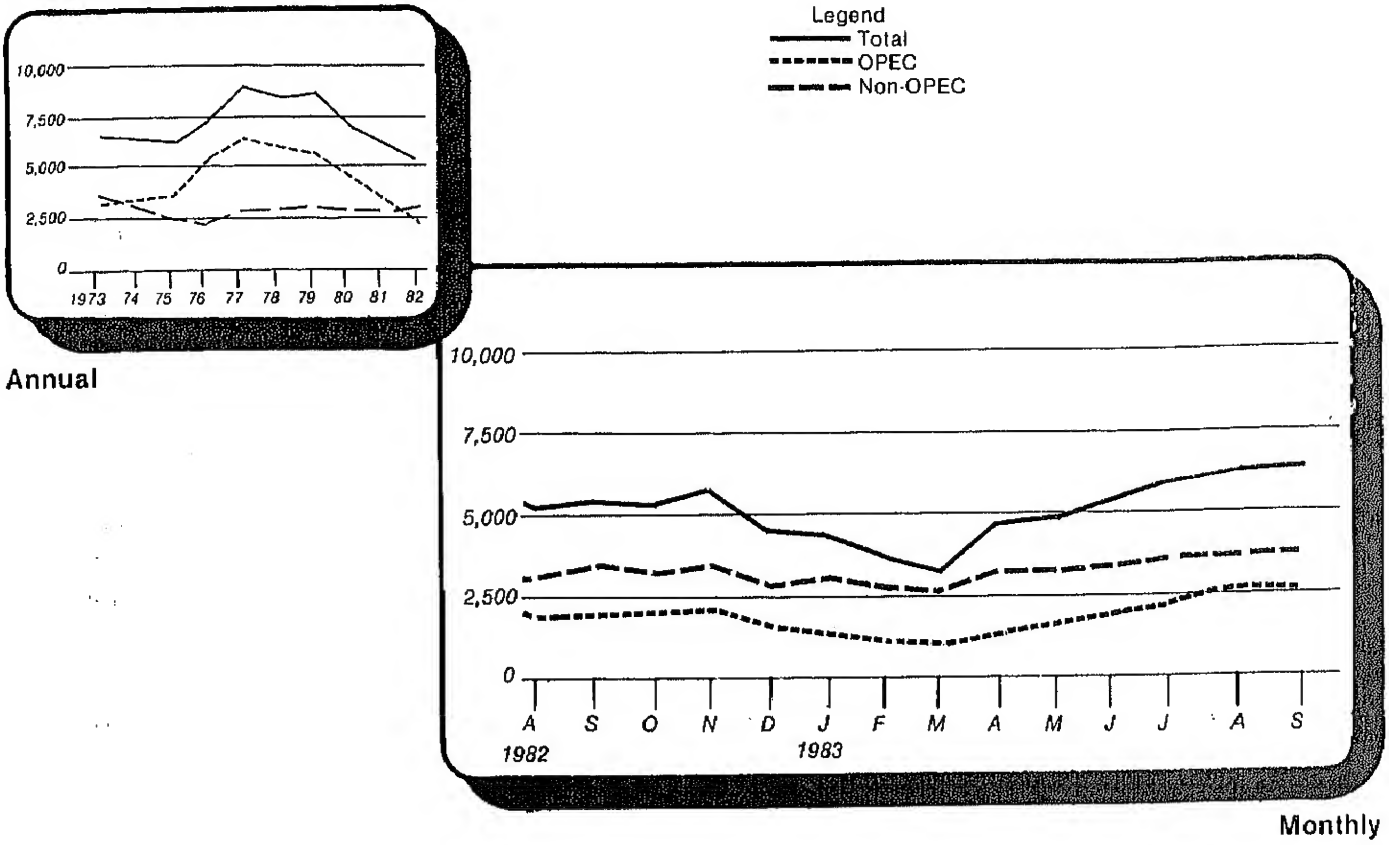
## Crude Oil and Petroleum Product Imports from Non-OPEC Sources[1]

| | Bahamas | Canada | Mexico | Netherlands Antilles | Trinidad and Tobago | United Kingdom | Puerto Rico[2] | Virgin Islands[2] | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | Thousand Barrels per Day | | | | | | | | | |
| **1973 AVERAGE** | **174** | **1,325** | **16** | **585** | **255** | **15** | **99** | **329** | **465** | **3,263** |
| **1974 AVERAGE** | **164** | **1,070** | **8** | **511** | **251** | **8** | **90** | **391** | **340** | **2,832** |
| **1975 AVERAGE** | **152** | **846** | **71** | **332** | **242** | **14** | **90** | **406** | **300** | **2,454** |
| **1976 AVERAGE** | **118** | **599** | **87** | **275** | **274** | **31** | **88** | **422** | **353** | **2,247** |
| **1977 AVERAGE** | **171** | **517** | **179** | **211** | **289** | **126** | **105** | **466** | **550** | **2,614** |
| **1978 AVERAGE** | **160** | **467** | **318** | **229** | **253** | **180** | **94** | **429** | **484** | **2,613** |
| **1979 AVERAGE** | **147** | **538** | **439** | **231** | **190** | **202** | **92** | **431** | **548** | **2,819** |
| **1980 AVERAGE** | **78** | **455** | **533** | **225** | **176** | **176** | **88** | **388** | **491** | **2,609** |
| 1981 January | 39 | 543 | 401 | 198 | 150 | 233 | 89 | 494 | 552 | 2,701 |
| February | 84 | 546 | 437 | 227 | 163 | 271 | 46 | 481 | 626 | 2,881 |
| March | 74 | 472 | 488 | 227 | 93 | 263 | 45 | 370 | 571 | 2,603 |
| April | 68 | 412 | 418 | 198 | 139 | 402 | 40 | 365 | 380 | 2,423 |
| May | 122 | 365 | 522 | 213 | 105 | 368 | 58 | 344 | 474 | 2,573 |
| June | 51 | 353 | 538 | 196 | 124 | 397 | 67 | 262 | 525 | 2,513 |
| July | 77 | 382 | 384 | 212 | 178 | 553 | 50 | 206 | 541 | 2,583 |
| August | 69 | 378 | 489 | 255 | 123 | 592 | 68 | 184 | 539 | 2,698 |
| September | 111 | 423 | 708 | 163 | 169 | 528 | 72 | 265 | 661 | 3,100 |
| October | 63 | 449 | 669 | 161 | 121 | 351 | 60 | 303 | 562 | 2,739 |
| November | 63 | 547 | 628 | 168 | 108 | 253 | 76 | 294 | 421 | 2,557 |
| December | 70 | 501 | 587 | 148 | 125 | 280 | 73 | 367 | 563 | 2,714 |
| **AVERAGE** | **74** | **447** | **522** | **197** | **133** | **375** | **62** | **327** | **534** | **2,672** |
| 1982 January | 58 | 513 | 425 | 179 | 106 | 346 | 62 | 334 | 452 | 2,474 |
| February | 67 | 537 | 476 | 221 | 120 | 181 | 38 | 362 | 508 | 2,510 |
| March | 43 | 437 | 503 | 189 | 118 | 294 | 62 | 307 | 480 | 2,433 |
| April | 82 | 360 | 476 | 184 | 166 | 247 | 36 | 266 | 690 | 2,507 |
| May | 77 | 419 | 766 | 152 | 95 | 516 | 47 | 302 | 607 | 2,981 |
| June | 32 | 481 | 797 | 148 | 129 | 557 | 58 | 322 | 708 | 3,231 |
| July | 64 | 536 | 783 | 158 | 118 | 433 | 38 | 376 | 698 | 3,204 |
| August | 80 | 443 | 853 | 145 | 106 | 520 | 24 | 317 | 650 | 3,137 |
| September | 92 | 493 | 897 | 195 | 89 | 631 | 51 | 278 | 746 | 3,472 |
| October | 45 | 459 | 682 | 148 | 109 | 666 | 52 | 262 | 801 | 3,222 |
| November | 51 | 553 | 860 | 212 | 90 | 623 | 81 | 334 | 706 | 3,508 |
| December | 88 | 561 | 689 | 174 | 102 | 438 | 48 | 336 | 480 | 2,916 |
| **AVERAGE** | **65** | **482** | **685** | **175** | **112** | **456** | **50** | **316** | **627** | **2,968** |
| 1983 January | 68 | 536 | 849 | 218 | 73 | 315 | 40 | 299 | 588 | 2,988 |
| February | 92 | 592 | 722 | 179 | 81 | 193 | 50 | 192 | 554 | 2,655 |
| March | 86 | 488 | 760 | 187 | 78 | 240 | 43 | 162 | 563 | 2,606 |
| April | 167 | 452 | 981 | 216 | 85 | 421 | 20 | 183 | 781 | 3,306 |
| May | 135 | 501 | 944 | 153 | 108 | 483 | 42 | 235 | 651 | 3,252 |
| June | 137 | 576 | 831 | 181 | 120 | 424 | 48 | 252 | 712 | 3,281 |
| July | 69 | 633 | 849 | 191 | 103 | 369 | 37 | 364 | 836 | 3,450 |
| August | 142 | 540 | 891 | 194 | 90 | 461 | 40 | 313 | 725 | 3,395 |
| September | 137 | 523 | 832 | 251 | 82 | 472 | 33 | 308 | 822 | 3,461 |
| **AVERAGE** | **115** | **537** | **852** | **197** | **91** | **377** | **39** | **257** | **693** | **3,158** |

[1] Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas as refined petroleum products which were refined from crude oil produced in OPEC countries.
[2] U.S. Possessions.
Totals may not equal sum of components due to independent rounding.
Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.
Geographic coverage: The 50 United States and the District of Columbia.
Sources: See "Sources" at the end of this section.

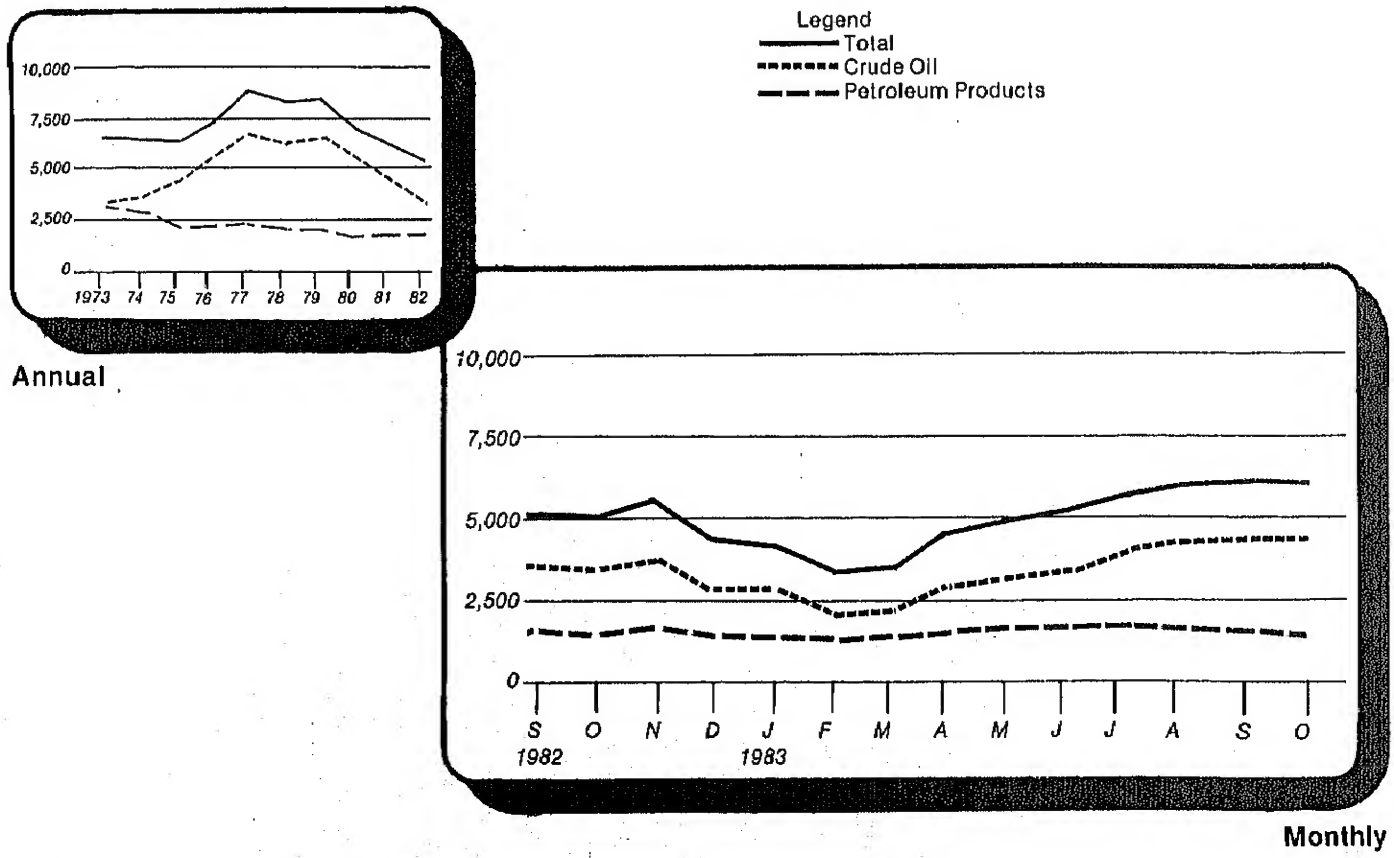
## Crude Oil (including SPR) and Petroleum Products Imports

(Thousand Barrels Per Day)




Annual

Monthly




Annual

Monthly

# Sources

1. 1973 through 1976: Bureau of Mines, U.S. Department of the Interior, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Mineral Industry Surveys.

2. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Monthly Petroleum Statistics Report*, (unleaded gasoline category).

3. 1977 through 1980: Energy Information Administration, U.S. Department of Energy, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, Energy Data Reports.

4. January 1981 through December 1982: Energy Information Administration, U.S. Department of Energy, *Petroleum Supply Annual.*

5. January 1983 through September 1983: Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).

6. October 1983: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).

7. January 1983 through October 1983: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies the U.S. Geological Survey. (See Explanatory Note 3).

# Detailed Statistics

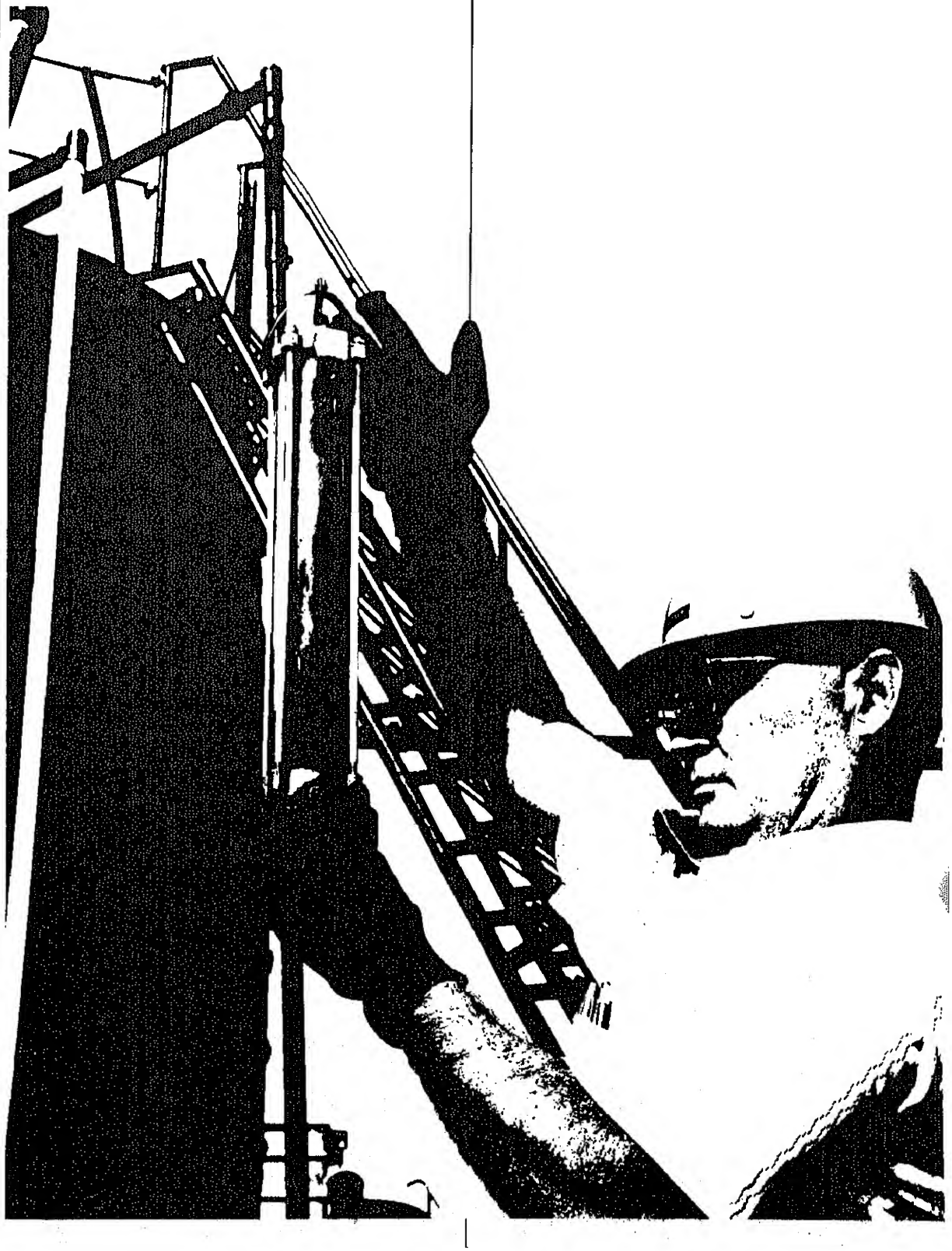


**Table 1. U.S. Petroleum Balance, September 1983**

| | Current Month | | Year-to-date | |
|---|---|---|---|---|
| | Thousand Barrels | Thousand Barrels per Day | Thousand Barrels | Thousand Barrels per Day |
| Crude Oil (Including Lease Condensate) | | | | |
| Field Production | | | | |
| (1) Alaska | E 51,663 | 1,722 | E 467,678 | 1,713 |
| (2) Lower 48 States | E 208,311 | 6,944 | E 1,897,743 | 6,951 |
| (3) Total U.S. | E 259,974 | 8,666 | E 2,365,421 | 8,665 |
| Net Imports | | | | |
| (4) Imports (Gross Excluding SPR) | 117,354 | 3,912 | 831,673 | 3,046 |
| (5) SPR Imports | 9,266 | 309 | 67,933 | 249 |
| (6) Exports | 5,315 | 177 | 47,108 | 173 |
| (7) Imports (Net Including SPR) | 121,304 | 4,043 | 852,499 | 3,123 |
| Other Sources | | | | |
| (8) SPR Withdrawal (+) or Addition (-) | -9,220 | -307 | -67,173 | -246 |
| (9) Other Stock Withdrawal (+) or Addition (-) | 3,477 | 116 | -1,589 | -6 |
| (10) Product Supplied and Losses | -2,007 | -67 | -18,088 | -66 |
| (11) Unaccounted for [1] | -188 | -6 | 55,955 | 205 |
| (12) Total Other Sources | -7,938 | -265 | -30,895 | -113 |
| (13) Crude Input to Refineries | 373,340 | 12,445 | 3,187,025 | 11,674 |
| (13) = (3) + (7) + (12) | | | | |
| Natural Gas Plant Liquids (NGPL) | | | | |
| (14) Field Production | 47,930 | 1,598 | 424,370 | 1,554 |
| (15) Imports [2] | 575 | 19 | 3,689 | 14 |
| (16) Stock Withdrawal (+) or Addition (-) [2] | 526 | 18 | -5,305 | -19 |
| (17) Total NGPL Supply | 49,031 | 1,634 | 422,754 | 1,549 |
| Other Liquids | | | | |
| Unfinished Oils and Gasoline Blending Components, Total | | | | |
| (18) Stock Withdrawal (+) or Addition (-) | -591 | -20 | -5,529 | -20 |
| (19) Imports | 9,876 | 329 | 70,512 | 258 |
| (20) Other Hydrocarbons and Alcohol New Supply (Field Production) | 1,797 | 60 | 14,525 | 53 |
| (21) Refinery Processing Gain [1] | 15,041 | 501 | 129,257 | 473 |
| (22) Crude Oil Product Supplied | 1,991 | 66 | 17,672 | 65 |
| (23) Total Other Liquids | 28,114 | 937 | 226,437 | 829 |
| (23) = (18) through (22) | | | | |
| (24) Total Production of Products [3] | 450,486 | 15,016 | 3,836,216 | 14,052 |
| (24) = (13) + (17) + (23) | | | | |
| Net Imports of Refined Products [3] | | | | |
| (25) Imports (Gross) | 45,560 | 1,519 | 374,402 | 1,371 |
| (26) Exports | 15,216 | 507 | 164,711 | 603 |
| (27) Imports (Net) | 30,345 | 1,011 | 209,691 | 768 |
| (28) Total New Supply of Products | 480,830 | 16,028 | 4,045,907 | 14,820 |
| (28) = (24) + (27) | | | | |
| (29) Refined Products Stock Withdrawal (+) or Addition (-) [3] | -18,964 | -632 | 49,464 | 181 |
| (30) Total Petroleum Products Supplied for Domestic Use | 461,866 | 15,396 | 4,095,371 | 15,001 |
| (30) = (28) + (29) | | | | |
| (31) Finished Motor Gasoline | 200,805 | 6,693 | 1,800,291 | 6,594 |
| (32) Distillate Fuel Oil | 77,039 | 2,568 | 707,708 | 2,592 |
| (33) Residual Fuel Oil | 39,716 | 1,324 | 384,818 | 1,410 |
| (34) Liquefied Petroleum Gases | 43,719 | 1,457 | 378,783 | 1,387 |
| (35) Other[4] | 98,598 | 3,287 | 806,099 | 2,953 |
| (36) Crude Oil | 1,991 | 66 | 17,672 | 65 |
| (37) Total Product Supplied | 461,866 | 15,396 | 4,095,371 | 15,001 |
| (37) = (31) through (36) | | | | |
| Ending Stocks, All Oils | | | | |
| (38) Crude Oil and Lease Condensate (Excluding SPR) | 351,633 | -- | 351,633 | -- |
| (39) Strategic Petroleum Reserve (SPR) | 361,000 | -- | 361,000 | -- |
| (40) Unfinished Oils | 112,645 | -- | 112,645 | -- |
| (41) Gasoline Blending Components | 40,706 | -- | 40,706 | -- |
| (42) Natural Gasoline and Unfractionated Stream[2] | 16,773 | -- | 16,773 | -- |
| (43) Finished Refined Products [3] | 609,392 | -- | 609,392 | -- |
| (44) Total Stocks | 1,492,149 | -- | 1,492,149 | -- |

1 A balancing item.
2 Includes isopentane, natural gasoline, unfractionated stream, and plant condensate only.
3 For products included see Explanatory Note 9.7.
4 Includes natural gasoline and isopentane, unfractionated stream, plant condensate, other liquids; and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases.
E =Estimated.
-- Not Applicable.
Note: Totals may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes 1, 2 and 9.7.

**Table 2. Supply and Disposition of Crude Oil and Petroleum Products, September 1983**
**(Thousand Barrels)**

| Commodity | Supply | | | | | Disposition | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | Ending Stocks |
| **Crude Oil (including lease condensate)** | E 259,974 | 0 | 126,619 | -5,743 | -188 | 16 | 373,340 | 5,315 | 1,991 | 712,633 |
| **Natural Gas Liquids and LRGs** | **47,567** | **10,912** | **5,919** | **-158** | **0** | **0** | **13,802** | **2,589** | **47,849** | **135,624** |
| Natural Gasoline and Isopentane | 9,428 | 0 | 437 | -5 | 0 | 0 | 5,732 | 0 | 4,128 | 7,008 |
| Unfractionated Stream | -482 | 0 | 0 | 482 | 0 | 0 | 0 | 0 | 0 | 9,315 |
| Plant Condensate | 792 | 0 | 138 | 49 | 0 | 0 | 977 | 0 | 2 | 450 |
| Liquefied Petroleum Gases | 37,829 | 10,912 | 5,344 | -684 | 0 | 0 | 7,093 | 2,589 | 43,719 | 118,851 |
| Ethane | 8,024 | 573 | 1,431 | -998 | 0 | 0 | 69 | (s) | 8,961 | 5,884 |
| Propane | 12,678 | 8,220 | 1,345 | 619 | 0 | 0 | 133 | 1,260 | 21,468 | 62,284 |
| Butane | 6,324 | 1,935 | 1,035 | -488 | 0 | 0 | 3,775 | 1,329 | 3,703 | 26,041 |
| Butane-Propane Mixtures | 12 | 185 | 374 | -134 | 0 | 0 | 261 | 0 | 303 | 1,813 |
| Ethane-Propane Mixtures | 8,01 | 0 | 1,159 | 76 | 0 | 0 | 0 | 0 | 9,247 | 12,748 |
| Isobutane | 2,652 | -1 | 0 | 241 | 0 | 0 | 2,855 | 0 | 37 | 10,081 |
| **Other Liquids** | **1,797** | **0** | **9,876** | **-591** | **0** | **0** | **16,321** | **0** | **-5,239** | **153,351** |
| Other Hydrocarbons and Alcohol | 1,797 | 0 | 0 | -90 | 0 | 0 | 1,707 | 0 | 0 | 397 |
| Unfinished Oils | 0 | 0 | 8,636 | -2,132 | 0 | 0 | 9,915 | 0 | -3,411 | 112,645 |
| Motor Gasoline Blending Components | 0 | 0 | 1,241 | 1,585 | 0 | 0 | 4,653 | 0 | -1,827 | 39,984 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 46 | 0 | 0 | 46 | 0 | 0 | 325 |
| **Finished Petroleum Products** | **363** | **407,592** | **40,217** | **-18,280** | **0** | **0** | **0** | **12,627** | **417,265** | **490,541** |
| Finished Motor Gasoline | 48 | 197,404 | 8,564 | -4,801 | 0 | 0 | 0 | 411 | 200,805 | 189,679 |
| Finished Leaded Motor Gasoline | 32 | 85,151 | 5,101 | 797 | 0 | 0 | 0 | 411 | 90,671 | 94,610 |
| Finished Unleaded Motor Gasoline | 16 | 112,253 | 3,463 | -5,598 | 0 | 0 | 0 | 0 | 110,134 | 95,069 |
| Finished Aviation Gasoline | 159 | 807 | 1 | 18 | 0 | 0 | 0 | 0 | 985 | 2,543 |
| Naphtha-Type Jet Fuel | 0 | 5,933 | 0 | -260 | 0 | 0 | 0 | (s) | 5,673 | 6,805 |
| Kerosene-Type Jet Fuel | 0 | 26,879 | 1,237 | -1,336 | 0 | 0 | 0 | 270 | 26,510 | 34,985 |
| Kerosene | 3 | 3,513 | 301 | -921 | 0 | 0 | 0 | 5 | 2,891 | 9,194 |
| Distillate Fuel Oil | 1 | 81,744 | 7,599 | -11,208 | 0 | 0 | 0 | 1,097 | 77,039 | 154,748 |
| Residual Fuel Oil | 0 | 24,448 | 20,698 | -1,398 | 0 | 0 | 0 | 4,032 | 39,716 | 49,691 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 4,775 | 42 | -145 | 0 | 0 | 0 | 171 | 4,501 | 2,066 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 7,578 | 0 | -92 | 0 | 0 | 0 | 591 | 6,895 | 2,157 |
| Special Naphthas | 97 | 1,718 | 776 | -96 | 0 | 0 | 0 | 403 | 2,092 | 3,165 |
| Lubricants | 0 | 4,672 | 248 | 496 | 0 | 0 | 0 | 555 | 4,862 | 10,954 |
| Waxes | 0 | 425 | 44 | 71 | 0 | 0 | 0 | 35 | 505 | 746 |
| Petroleum Coke | 0 | 12,885 | 0 | -375 | 0 | 0 | 0 | 4,998 | 7,512 | 4,830 |
| Asphalt and Road Oil | 0 | 15,144 | 391 | 2,129 | 0 | 0 | 0 | 3 | 17,660 | 17,118 |
| Still Gas | 0 | 17,736 | 0 | 0 | 0 | 0 | 0 | 0 | 17,736 | 0 |
| Miscellaneous Products | 55 | 1,931 | 316 | -362 | 0 | 0 | 0 | 56 | 1,884 | 1,860 |
| **Total** | **309,701** | **418,504** | **182,631** | **-24,772** | **-188** | **16** | **403,463** | **20,531** | **461,866** | **1,492,149** |

1 Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

## Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - September 1983
(Thousand Barrels)

| Commodity | Supply | | | | | Disposition | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied | Ending Stocks |
| **Crude Oil (including lease condensate)** | E 2,365,421 | 0 | 899,607 | -68,762 | 55,955 | 416 | 3,187,025 | 47,108 | 17,672 | 712,633 |
| **Natural Gas Liquids and LRGs** | 421,006 | 88,302 | 55,077 | -21,438 | 0 | 0 | 120,142 | 22,764 | 400,041 | 135,624 |
| Natural Gasoline and Isopentane | 70,228 | 0 | 1,840 | -1,021 | 0 | 0 | 49,808 | 0 | 21,239 | 7,008 |
| Unfractionated Stream | 5,445 | 0 | 0 | -5,276 | 0 | 0 | 169 | 0 | 0 | 9,315 |
| Plant Condensate | 5,689 | 0 | 1,849 | 992 | 0 | 0 | 8,512 | 0 | 18 | 450 |
| Liquefied Petroleum Gases | 339,644 | 88,302 | 51,387 | -16,133 | 0 | 0 | 61,653 | 22,764 | 378,783 | 118,851 |
| Ethane | 68,914 | 4,116 | 12,878 | 87 | 0 | 0 | 720 | 30 | 85,244 | 5,884 |
| Propane | 119,238 | 72,972 | 11,694 | -4,047 | 0 | 0 | 1,115 | 13,651 | 185,091 | 62,284 |
| Butane | 55,331 | 10,043 | 11,858 | -9,359 | 0 | 0 | 34,762 | 9,083 | 24,028 | 26,041 |
| Butane-Propane Mixtures | 1,484 | 1,000 | 4,786 | 312 | 0 | 0 | 2,091 | 0 | 5,491 | 1,813 |
| Ethane-Propane Mixtures | 69,559 | 0 | 10,171 | -1,466 | 0 | 0 | 48 | 0 | 78,216 | 12,748 |
| Isobutane | 25,118 | 171 | 0 | -1,660 | 0 | 0 | 22,917 | 0 | 712 | 10,081 |
| **Other Liquids** | 14,525 | 0 | 70,512 | -5,529 | 0 | 0 | 124,606 | 0 | -45,098 | 153,351 |
| Other Hydrocarbons and Alcohol | 14,525 | 0 | 0 | -86 | 0 | 0 | 14,439 | 0 | 0 | 397 |
| Unfinished Oils | 0 | 0 | 61,647 | -7,368 | 0 | 0 | 78,006 | 0 | -23,727 | 112,645 |
| Motor Gasoline Blending Components | 0 | 0 | 8,865 | 1,758 | 0 | 0 | 31,511 | 0 | -20,888 | 39,984 |
| Aviation Gasoline Blending Components | 0 | 0 | 1 | 167 | 0 | 0 | 650 | 0 | -482 | 325 |
| **Finished Petroleum Products** | 3,364 | 3,472,728 | 323,014 | 65,597 | 0 | 0 | 0 | 141,947 | 3,722,757 | 490,541 |
| Finished Motor Gasoline | 620 | 1,723,940 | 65,725 | 12,858 | 0 | 0 | 0 | 2,852 | 1,800,291 | 189,679 |
| Finished Leaded Motor Gasoline | 423 | 777,109 | 36,395 | 7,545 | 0 | 0 | 0 | 2,852 | 818,620 | 94,610 |
| Finished Unleaded Motor Gasoline | 197 | 946,831 | 29,330 | 5,313 | 0 | 0 | 0 | 0 | 981,671 | 95,069 |
| Finished Aviation Gasoline | 862 | 6,209 | 212 | -229 | 0 | 0 | 0 | 0 | 7,054 | 2,543 |
| Naphtha-Type Jet Fuel | 0 | 57,272 | 0 | 384 | 0 | 0 | 0 | 201 | 57,455 | 6,805 |
| Kerosene-Type Jet Fuel | 1 | 222,362 | 7,021 | -2,984 | 0 | 0 | 0 | 1,099 | 225,301 | 34,985 |
| Kerosene | 30 | 27,888 | 1,947 | 1,598 | 0 | 0 | 0 | 73 | 31,390 | 9,194 |
| Distillate Fuel Oil | 11 | 653,776 | 41,501 | 30,831 | 0 | 0 | 0 | 18,411 | 707,708 | 154,748 |
| Residual Fuel Oil | 0 | 231,054 | 188,622 | 18,538 | 0 | 0 | 0 | 53,397 | 384,818 | 49,691 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 38,598 | 3,557 | -99 | 0 | 0 | 0 | 1,206 | 40,851 | 2,066 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 70,840 | 179 | 23 | 0 | 0 | 0 | 4,238 | 66,804 | 2,157 |
| Special Naphthas | 898 | 14,844 | 5,440 | 309 | 0 | 0 | 0 | 902 | 20,589 | 3,165 |
| Lubricants | 0 | 38,958 | 2,053 | 2,227 | 0 | 0 | 0 | 4,404 | 38,833 | 10,954 |
| Waxes | 0 | 4,046 | 232 | 40 | 0 | 0 | 0 | 197 | 4,121 | 746 |
| Petroleum Coke | 0 | 112,925 | 0 | 1,891 | 0 | 0 | 0 | 54,459 | 60,357 | 4,830 |
| Asphalt and Road Oil | 0 | 104,998 | 2,132 | 151 | 0 | 0 | 0 | 234 | 107,048 | -17,118 |
| Still Gas | 0 | 149,592 | 0 | 0 | 0 | 0 | 0 | 0 | 149,592 | 0 |
| Miscellaneous Products | 942 | 15,426 | 4,393 | 59 | 0 | 0 | 0 | 274 | 20,545 | 1,860 |
| **Total** | 2,804,316 | 3,561,030 | 1,348,209 | -30,132 | 55,955 | 416 | 3,431,773 | 211,818 | 4,095,371 | 1,492,149 |

1 Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E =Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

**Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, September 1983**
**(Thousand Barrels per Day)**

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (Including lease condensate)** | E 8,666 | 0 | 4,221 | -191 | -6 | 1 | 12,445 | 177 | 66 |
| **Natural Gas Liquids and LRGs** | 1,586 | 364 | 197 | -5 | 0 | 0 | 460 | 86 | 1,595 |
| Natural Gasoline and Isopentane | 314 | 0 | 15 | (s) | 0 | 0 | 191 | 0 | 138 |
| Unfractionated Stream | -16 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 |
| Plant Condensate | 26 | 0 | 5 | 2 | 0 | 0 | 33 | 0 | (s) |
| Liquefied Petroleum Gases | 1,261 | 364 | 178 | -23 | 0 | 0 | 236 | 86 | 1,457 |
| Ethane | 267 | 19 | 48 | -33 | 0 | 0 | 2 | (s) | 299 |
| Propane | 423 | 274 | 45 | 21 | 0 | 0 | 4 | 42 | 716 |
| Butane | 211 | 65 | 35 | -16 | 0 | 0 | 126 | 44 | 123 |
| Butane-Propane Mixtures | 5 | 6 | 12 | -4 | 0 | 0 | 9 | 0 | 10 |
| Ethane-Propane Mixtures | 267 | 0 | 39 | 3 | 0 | 0 | 0 | 0 | 308 |
| Isobutane | 88 | (s) | 0 | 8 | 0 | 0 | 95 | 0 | 1 |
| **Other Liquids** | 60 | 0 | 329 | -20 | 0 | 0 | 544 | 0 | -175 |
| Other Hydrocarbons and Alcohol | 60 | 0 | 0 | -3 | 0 | 0 | 57 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 288 | -71 | 0 | 0 | 331 | 0 | -114 |
| Motor Gasoline Blending Components | 0 | 0 | 41 | 53 | 0 | 0 | 155 | 0 | -61 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 |
| **Finished Petroleum Products** | 12 | 13,586 | 1,341 | -609 | 0 | 0 | 0 | 421 | 13,909 |
| Finished Motor Gasoline | 2 | 6,580 | 285 | -160 | 0 | 0 | 0 | 14 | 6,693 |
| Finished Leaded Motor Gasoline | 1 | 2,838 | 170 | 27 | 0 | 0 | 0 | 14 | 3,022 |
| Finished Unleaded Motor Gasoline | 1 | 3,742 | 115 | -187 | 0 | 0 | 0 | 0 | 3,671 |
| Finished Aviation Gasoline | 5 | 27 | (s) | 1 | 0 | 0 | 0 | 0 | 33 |
| Naphtha-Type Jet Fuel | 0 | 198 | 0 | -9 | 0 | 0 | 0 | (s) | 189 |
| Kerosene-Type Jet Fuel | 0 | 896 | 41 | -45 | 0 | 0 | 0 | 9 | 884 |
| Kerosene | (s) | 117 | 10 | -31 | 0 | 0 | 0 | (s) | 96 |
| Distillate Fuel Oil | (s) | 2,725 | 253 | -374 | 0 | 0 | 0 | 37 | 2,568 |
| Residual Fuel Oil | 0 | 815 | 690 | -47 | 0 | 0 | 0 | 134 | 1,324 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 159 | 1 | -5 | 0 | 0 | 0 | 6 | 150 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 253 | 0 | -3 | 0 | 0 | 0 | 20 | 230 |
| Special Naphthas | 3 | 57 | 26 | -3 | 0 | 0 | 0 | 13 | 70 |
| Lubricants | 0 | 156 | 8 | 17 | 0 | 0 | 0 | 18 | 162 |
| Waxes | 0 | 14 | 1 | 2 | 0 | 0 | 0 | 1 | 17 |
| Petroleum Coke | 0 | 430 | 0 | -13 | 0 | 0 | 0 | 167 | 250 |
| Asphalt and Road Oil | 0 | 505 | 13 | 71 | 0 | 0 | 0 | (s) | 589 |
| Still Gas | 0 | 591 | 0 | 0 | 0 | 0 | 0 | 0 | 591 |
| Miscellaneous Products | 2 | 64 | 11 | -12 | 0 | 0 | 0 | 2 | 63 |
| **Total** | 10,323 | 13,950 | 6,088 | -826 | -6 | 1 | 13,449 | 684 | 15,396 |

[1] Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

## Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - September 1983
(Thousand Barrels per Day)

| Commodity | Supply | | | | | Disposition | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Crude Losses | Refinery Inputs | Exports | Products Supplied |
| **Crude Oil (including lease condensate)** | E 8,665 | 0 | 3,295 | -252 | 205 | 2 | 11,674 | 173 | 65 |
| **Natural Gas Liquids and LRGs** | 1,542 | 323 | 202 | -79 | 0 | 0 | 440 | 83 | 1,465 |
| Natural Gasoline and Isopentane | 257 | 0 | 7 | -4 | 0 | 0 | 182 | 0 | 78 |
| Unfractionated Stream | 20 | 0 | 0 | -19 | 0 | 0 | 1 | 0 | 0 |
| Plant Condensate | 21 | 0 | 7 | 4 | 0 | 0 | 31 | 0 | (s) |
| Liquefied Petroleum Gases | 1,244 | 323 | 188 | -59 | 0 | 0 | 226 | 83 | 1,387 |
| Ethane | 252 | 15 | 47 | (s) | 0 | 0 | 3 | (s) | 312 |
| Propane | 437 | 267 | 43 | -15 | 0 | 0 | 4 | 50 | 678 |
| Butane | 203 | 37 | 43 | -34 | 0 | 0 | 127 | 33 | 88 |
| Butane-Propane Mixtures | 5 | 4 | 18 | 1 | 0 | 0 | 8 | 0 | 20 |
| Ethane-Propane Mixtures | 255 | 0 | 37 | -5 | 0 | 0 | (s) | 0 | 287 |
| Isobutane | 92 | 1 | 0 | -6 | 0 | 0 | 84 | 0 | 3 |
| **Other Liquids** | 53 | 0 | 258 | -20 | 0 | 0 | 456 | 0 | -165 |
| Other Hydrocarbons and Alcohol | 53 | 0 | 0 | (s) | 0 | 0 | 53 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 226 | -27 | 0 | 0 | 286 | 0 | -87 |
| Motor Gasoline Blending Components | 0 | 0 | 32 | 6 | 0 | 0 | 115 | 0 | -77 |
| Aviation Gasoline Blending Components | 0 | 0 | (s) | 1 | 0 | 0 | 2 | 0 | -2 |
| **Finished Petroleum Products** | 12 | 12,721 | 1,183 | 240 | 0 | 0 | 0 | 520 | 13,636 |
| Finished Motor Gasoline | 2 | 6,315 | 241 | 47 | 0 | 0 | 0 | 10 | 6,594 |
| Finished Leaded Motor Gasoline | 2 | 2,847 | 133 | 28 | 0 | 0 | 0 | 10 | 2,999 |
| Finished Unleaded Motor Gasoline | 1 | 3,468 | 107 | 19 | 0 | 0 | 0 | 0 | 3,596 |
| Finished Aviation Gasoline | 3 | 23 | 1 | -1 | 0 | 0 | 0 | 0 | 26 |
| Naphtha-Type Jet Fuel | 0 | 210 | 0 | 1 | 0 | 0 | 0 | 1 | 210 |
| Kerosene-Type Jet Fuel | (s) | 815 | 26 | -11 | 0 | 0 | 0 | 4 | 825 |
| Kerosene | (s) | 102 | 7 | 6 | 0 | 0 | 0 | (s) | 115 |
| Distillate Fuel Oil | (s) | 2,395 | 152 | 113 | 0 | 0 | 0 | 67 | 2,592 |
| Residual Fuel Oil | 0 | 846 | 691 | 68 | 0 | 0 | 0 | 196 | 1,410 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 0 | 141 | 13 | (s) | 0 | 0 | 0 | 4 | 150 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 259 | 1 | (s) | 0 | 0 | 0 | 16 | 245 |
| Special Naphthas | 3 | 54 | 20 | 1 | 0 | 0 | 0 | 3 | 75 |
| Lubricants | 0 | 143 | 8 | 8 | 0 | 0 | 0 | 16 | 142 |
| Waxes | 0 | 15 | 1 | (s) | 0 | 0 | 0 | 1 | 15 |
| Petroleum Coke | 0 | 414 | 0 | 7 | 0 | 0 | 0 | 199 | 221 |
| Asphalt and Road Oil | 0 | 385 | 8 | 1 | 0 | 0 | 0 | 1 | 392 |
| Still Gas | 0 | 548 | 0 | 0 | 0 | 0 | 0 | 0 | 548 |
| Miscellaneous Products | 3 | 57 | 16 | (s) | 0 | 0 | 0 | 1 | 75 |
| **Total** | 10,272 | 13,044 | 4,938 | -110 | 205 | 2 | 12,571 | 776 | 15,001 |

[1] Unaccounted for crude oil is a balancing item.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

## Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, September 1983

(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 2,352 | 0 | 27,455 | 1,651 | -2,148 | 4,841 | 0 | 34,151 | 0 | 0 | 15,858 |
| **Natural Gas Liquids and LRGs** | 842 | 1,217 | 418 | -292 | 0 | 2,311 | 0 | 94 | 147 | 4,256 | 5,959 |
| Liquefied Petroleum Gases | 722 | 1,217 | 334 | -268 | 0 | 2,311 | 0 | 65 | 147 | 4,105 | 5,864 |
| Other Products[2] | 120 | 0 | 84 | -24 | 0 | 0 | 0 | 29 | 0 | 151 | 95 |
| **Other Liquids** | 214 | 0 | 4,452 | -3,240 | 0 | 37 | 0 | 2,292 | 0 | -829 | 21,242 |
| Other Hydrocarbons and Alcohol | 214 | 0 | 0 | -101 | 0 | 0 | 0 | 113 | 0 | 0 | 163 |
| Unfinished Oils | 0 | 0 | 4,132 | -2,628 | 0 | 37 | 0 | 2,301 | 0 | -760 | 15,665 |
| Motor Gasoline Blending Components | 0 | 0 | 319 | -504 | 0 | 0 | 0 | -115 | 0 | -70 | 5,407 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -7 | 0 | 0 | 0 | -7 | 0 | 0 | 7 |
| **Finished Petroleum Products** | 41 | 36,789 | 33,935 | -6,511 | 0 | 69,090 | 0 | 0 | 1,024 | 132,320 | 172,723 |
| Finished Motor Gasoline | 41 | 17,573 | 7,306 | -950 | 0 | 41,877 | 0 | 0 | 1 | 65,847 | 58,691 |
| Finished Leaded Motor Gasoline | 25 | 6,354 | 4,494 | -71 | 0 | 15,879 | 0 | 0 | 1 | 26,681 | 30,036 |
| Finished Unleaded Motor Gasoline | 16 | 11,219 | 2,812 | -879 | 0 | 25,998 | 0 | 0 | 0 | 39,166 | 28,655 |
| Finished Aviation Gasoline | 0 | 1 | 1 | 47 | 0 | 203 | 0 | 0 | 0 | 252 | 450 |
| Naphtha-Type Jet Fuel | 0 | 398 | 0 | 97 | 0 | 508 | 0 | 0 | (s) | 1,003 | 646 |
| Kerosene-Type Jet Fuel | 0 | 1,107 | 967 | -528 | 0 | 8,336 | 0 | 0 | (s) | 9,882 | 8,977 |
| Kerosene | 0 | 48 | 300 | -76 | 0 | 283 | 0 | 0 | 1 | 554 | 3,405 |
| Distillate Fuel Oil | 0 | 7,870 | 6,464 | -5,582 | 0 | 13,870 | 0 | 0 | 127 | 22,496 | 67,506 |
| Residual Fuel Oil | 0 | 2,420 | 17,868 | 221 | 0 | 2,349 | 0 | 0 | (s) | 22,858 | 23,529 |
| Naphtha and Other Oils for Petro. Feed. | 0 | 334 | 18 | 10 | 0 | 187 | 0 | 0 | 37 | 512 | 37 |
| Special Naphthas | 0 | 32 | 128 | 51 | 0 | 116 | 0 | 0 | 370 | -43 | 689 |
| Lubricants | 0 | 696 | 207 | 310 | 0 | 613 | 0 | 0 | 100 | 1,726 | 3,009 |
| Waxes | 0 | 95 | 7 | -1 | 0 | 7 | 0 | 0 | 6 | 102 | 155 |
| Petroleum Coke | 0 | 1,213 | 0 | 28 | 0 | 0 | 0 | 0 | 365 | 876 | 917 |
| Asphalt and Road Oil | 0 | 3,038 | 377 | -82 | 0 | 445 | 0 | 0 | 2 | 3,777 | 4,319 |
| Still Gas | 0 | 1,747 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,747 | 0 |
| Miscellaneous Products | 0 | 217 | 292 | -56 | 0 | 296 | 0 | 0 | 15 | 734 | 393 |
| **Total** | 3,449 | 38,006 | 66,260 | -8,392 | -2,148 | 76,279 | 0 | 36,537 | 1,171 | 135,747 | 215,782 |

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E =Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

**Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, September 1983**
**(Thousand Barrels)**

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 31,467 | 0 | 24,575 | 175 | 29,120 | 1,147 | 0 | 85,959 | 525 | 0 | 76,956 |
| **Natural Gas Liquids and LRGs** | 8,962 | 2,360 | 4,127 | 1,011 | 0 | 3,053 | 0 | 4,352 | 1,692 | 13,469 | 43,439 |
| Liquefied Petroleum Gases | 8,266 | 2,360 | 4,127 | 1,512 | 0 | 1,481 | 0 | 2,688 | 1,692 | 13,366 | 38,502 |
| Other Products[2] | 696 | 0 | 0 | -501 | 0 | 1,572 | 0 | 1,664 | 0 | 103 | 4,937 |
| **Other Liquids** | 349 | 0 | 503 | 1,300 | 0 | 911 | 0 | 3,099 | 0 | -36 | 23,744 |
| Other Hydrocarbons and Alcohol | 349 | 0 | 0 | 18 | 0 | 0 | 0 | 367 | 0 | 0 | 102 |
| Unfinished Oils | 0 | 0 | 403 | 951 | 0 | -78 | 0 | 1,039 | 0 | 237 | 16,053 |
| Motor Gasoline Blending Components | 0 | 0 | 100 | 341 | 0 | 989 | 0 | 1,703 | 0 | -273 | 7,469 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | -10 | 0 | 0 | 0 | -10 | 0 | 0 | 120 |
| **Finished Petroleum Products** | 6 | 94,576 | 604 | -1,528 | 0 | 21,544 | 0 | 0 | 439 | 114,764 | 123,094 |
| Finished Motor Gasoline | 0 | 53,901 | 73 | -1,281 | 0 | 12,933 | 0 | 0 | 164 | 65,462 | 58,242 |
| Finished Leaded Motor Gasoline | 0 | 24,280 | 65 | 1,490 | 0 | 6,474 | 0 | 0 | 164 | 32,145 | 28,890 |
| Finished Unleaded Motor Gasoline | 0 | 29,621 | 8 | -2,771 | 0 | 6,459 | 0 | 0 | 0 | 33,317 | 29,352 |
| Finished Aviation Gasoline | 0 | 92 | 0 | -53 | 0 | 185 | 0 | 0 | 0 | 224 | 653 |
| Naphtha-Type Jet Fuel | 0 | 882 | 0 | 122 | 0 | 131 | 0 | 0 | 0 | 1,135 | 1,364 |
| Kerosene-Type Jet Fuel | 0 | 3,517 | 0 | 320 | 0 | 1,353 | 0 | 0 | 0 | 5,190 | 7,511 |
| Kerosene | 0 | 705 | 1 | -121 | 0 | 71 | 0 | 0 | 4 | 652 | 2,099 |
| Distillate Fuel Oil | 0 | 19,962 | 175 | -2,433 | 0 | 6,804 | 0 | 0 | 0 | 24,508 | 39,121 |
| Residual Fuel Oil | 0 | 1,826 | 299 | 208 | 0 | -743 | 0 | 0 | 0 | 1,590 | 3,462 |
| Naphtha and Other Oils for Petro. Feed. | 0 | 1,042 | 2 | 11 | 0 | 13 | 0 | 0 | 74 | 994 | 227 |
| Special Naphthas | 0 | 478 | 38 | 39 | 0 | 114 | 0 | 0 | 1 | 668 | 550 |
| Lubricants | 0 | 680 | 9 | 55 | 0 | 265 | 0 | 0 | 19 | 990 | 1,923 |
| Waxes | 0 | 30 | 2 | 15 | 0 | 0 | 0 | 0 | (s) | 47 | 73 |
| Petroleum Coke | 0 | 3,173 | 0 | 61 | 0 | 0 | 0 | 0 | 175 | 3,059 | 723 |
| Asphalt and Road Oil | 0 | 4,112 | 1 | 1,594 | 0 | 608 | 0 | 0 | (s) | 6,315 | 6,917 |
| Still Gas | 0 | 4,006 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,006 | 0 |
| Miscellaneous Products | 6 | 170 | 4 | -65 | 0 | -190 | 0 | 0 | (s) | -75 | 229 |
| **Total** | 40,784 | 96,936 | 29,809 | 958 | 29,120 | 26,655 | 0 | 93,410 | 2,656 | 128,197 | 267,233 |

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E =Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

**Table 8. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, September 1983**
**(Thousand Barrels)**

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 124,455 | 0 | 67,158 | -7,190 | -22,765 | 14,383 | -4 | 176,018 | 0 | 27 | 522,543 |
| **Natural Gas Liquids and LRGs** | 34,393 | 6,061 | 374 | -518 | 0 | -4,137 | 0 | 8,246 | 658 | 27,269 | 81,542 |
| Liquefied Petroleum Gases | 27,549 | 6,061 | 374 | -1,557 | 0 | -3,657 | 0 | 3,684 | 658 | 24,428 | 70,417 |
| Other Products[2] | 6,844 | 0 | 0 | 1,039 | 0 | -480 | 0 | 4,562 | 0 | 2,841 | 11,125 |
| **Other Liquids** | 614 | 0 | 4,165 | -906 | 0 | -1,081 | 0 | 8,296 | 0 | -5,504 | 72,883 |
| Other Hydrocarbons and Alcohol | 614 | 0 | 0 | -6 | 0 | 0 | 0 | 608 | 0 | 0 | 123 |
| Unfinished Oils | 0 | 0 | 4,009 | -1,440 | 0 | -92 | 0 | 5,578 | 0 | -3,101 | 54,718 |
| Motor Gasoline Blending Components | 0 | 0 | 156 | 492 | 0 | -989 | 0 | 2,062 | 0 | -2,403 | 17,884 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 48 | 0 | 0 | 0 | 48 | 0 | 0 | 158 |
| **Finished Petroleum Products** | 307 | 192,732 | 4,067 | -9,435 | 0 | -94,020 | 0 | 0 | 5,592 | 88,060 | 129,479 |
| Finished Motor Gasoline | 0 | 88,907 | 714 | -3,199 | 0 | -56,230 | 0 | 0 | (s) | 30,191 | 47,085 |
| Finished Leaded Motor Gasoline | 0 | 37,121 | 460 | -1,108 | 0 | -23,093 | 0 | 0 | (s) | 13,379 | 23,488 |
| Finished Unleaded Motor Gasoline | 0 | 51,786 | 254 | -2,091 | 0 | -33,137 | 0 | 0 | 0 | 16,812 | 23,597 |
| Finished Aviation Gasoline | 159 | 360 | 0 | 85 | 0 | -413 | 0 | 0 | 0 | 191 | 836 |
| Naphtha-Type Jet Fuel | 0 | 2,747 | 0 | -150 | 0 | -854 | 0 | 0 | 0 | 1,743 | 2,564 |
| Kerosene-Type Jet Fuel | 0 | 14,150 | 176 | -413 | 0 | -10,305 | 0 | 0 | 240 | 3,368 | 11,618 |
| Kerosene | 3 | 2,563 | (s) | -674 | 0 | -354 | 0 | 0 | (s) | 1,538 | 3,275 |
| Distillate Fuel Oil | 1 | 38,880 | 846 | -3,388 | 0 | -20,875 | 0 | 0 | 203 | 15,261 | 34,659 |
| Residual Fuel Oil | 0 | 11,082 | 1,663 | -558 | 0 | -2,542 | 0 | 0 | 1,877 | 7,768 | 13,823 |
| Naphtha and Other Oils for Petro. Feed. | 0 | 10,421 | 22 | -153 | 0 | -200 | 0 | 0 | 642 | 9,448 | 3,220 |
| Special Naphthas | 97 | 1,096 | 595 | -170 | 0 | -230 | 0 | 0 | 31 | 1,357 | 1,590 |
| Lubricants | 0 | 2,921 | 23 | 27 | 0 | -888 | 0 | 0 | 376 | 1,707 | 4,747 |
| Waxes | 0 | 235 | 22 | 57 | 0 | -7 | 0 | 0 | 24 | 284 | 464 |
| Petroleum Coke | 0 | 5,267 | 0 | -432 | 0 | 0 | 0 | 0 | 2,164 | 2,671 | 951 |
| Asphalt and Road Oil | 0 | 4,804 | 0 | -233 | 0 | -1,053 | 0 | 0 | (s) | 3,518 | 3,665 |
| Still Gas | 0 | 7,985 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,985 | 0 |
| Miscellaneous Products | 47 | 1,314 | 8 | -234 | 0 | -69 | 0 | 0 | 35 | 1,030 | 982 |
| **Total** | 159,769 | 198,793 | 75,764 | -18,049 | -22,765 | -84,855 | -4 | 192,560 | 6,249 | 109,851 | 806,447 |

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E = Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

## Table 9. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, September 1983
(Thousand Barrels)

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 16,599 | 0 | 1,182 | -351 | -3,807 | 0 | 0 | 13,618 | 0 | 5 | 12,821 |
| **Natural Gas Liquids and LRGs** | 2,329 | 154 | 395 | -54 | 0 | -1,227 | 0 | 531 | 1 | 1,065 | 1,131 |
| Liquefied Petroleum Gases | 702 | 154 | 341 | -51 | 0 | -135 | 0 | 350 | 1 | 660 | 554 |
| Other Products[2] | 1,627 | 0 | 54 | -3 | 0 | -1,092 | 0 | 181 | 0 | 405 | 577 |
| **Other Liquids** | 0 | 0 | 91 | -106 | 0 | 0 | 0 | -658 | 0 | 643 | 4,056 |
| Other Hydrocarbons and Alcohol | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Unfinished Oils | 0 | 0 | 91 | -19 | 0 | 0 | 0 | -649 | 0 | 721 | 2,475 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | -88 | 0 | 0 | 0 | -10 | 0 | -78 | 1,581 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | 9 | 13,569 | 149 | 884 | 0 | 176 | 0 | 0 | 4 | 14,784 | 9,344 |
| Finished Motor Gasoline | 7 | 6,804 | 54 | 125 | 0 | 168 | 0 | 0 | (s) | 7,158 | 4,303 |
| Finished Leaded Motor Gasoline | 7 | 4,224 | 54 | 140 | 0 | -22 | 0 | 0 | (s) | 4,403 | 2,647 |
| Finished Unleaded Motor Gasoline | 0 | 2,580 | 0 | -15 | 0 | 190 | 0 | 0 | 0 | 2,755 | 1,656 |
| Finished Aviation Gasoline | 0 | 23 | 0 | 11 | 0 | 25 | 0 | 0 | 0 | 59 | 37 |
| Naphtha-Type Jet Fuel | 0 | 363 | 0 | -13 | 0 | -92 | 0 | 0 | 0 | 258 | 317 |
| Kerosene-Type Jet Fuel | 0 | 685 | 0 | -112 | 0 | 438 | 0 | 0 | 0 | 1,011 | 714 |
| Kerosene | 0 | -3 | 0 | -5 | 0 | 0 | 0 | 0 | 0 | -8 | 30 |
| Distillate Fuel Oil | 0 | 3,629 | 63 | 355 | 0 | -363 | 0 | 0 | 0 | 3,684 | 2,685 |
| Residual Fuel Oil | 0 | 345 | 31 | -2 | 0 | 0 | 0 | 0 | 0 | 374 | 474 |
| Naphtha and Other Oils for Petro. Feed. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | -2 | 4 |
| Special Naphthas | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 |
| Lubricants | 0 | 21 | (s) | 6 | 0 | 0 | 0 | 0 | 1 | 27 | 52 |
| Waxes | 0 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 0 |
| Petroleum Coke | 0 | 297 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 302 | 148 |
| Asphalt and Road Oil | 0 | 833 | 0 | 504 | 0 | 0 | 0 | 0 | 1 | 1,336 | 566 |
| Still Gas | 0 | 529 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 529 | 0 |
| Miscellaneous Products | 2 | 30 | (s) | 9 | 0 | 0 | 0 | 0 | 0 | 41 | 5 |
| **Total** | 18,937 | 13,723 | 1,818 | 373 | -3,807 | -1,051 | 0 | 13,491 | 5 | 16,498 | 27,352 |

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E =Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

**Table 10. PAD District V, Supply and Disposition of Crude Oil and Petroleum Products, September 1983**
**(Thousand Barrels)**

| Commodity | Supply | | | | | | Disposition | | | | Ending Stocks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Field Production | Refinery Production | Imports | Stock Withdrawal (+) or Addition (-) | Unaccounted For Crude Oil[1] | Net Receipts | Crude Losses | Refinery Inputs | Exports | Products Supplied | |
| **Crude Oil (including lease condensate)** | E 85,101 | 0 | 6,248 | -28 | -587 | -20,371 | 20 | 63,594 | 4,790 | 1,959 | 84,455 |
| **Natural Gas Liquids and LRGs** | 1,041 | 1,120 | 605 | -305 | 0 | 0 | 0 | 579 | 92 | 1,790 | 3,553 |
| Liquefied Petroleum Gases | 590 | 1,120 | 168 | -320 | 0 | 0 | 0 | 306 | 92 | 1,160 | 3,514 |
| Other Products[2] | 451 | 0 | 437 | 15 | 0 | 0 | 0 | 273 | 0 | 630 | 39 |
| **Other Liquids** | 620 | 0 | 665 | 2,361 | 0 | 133 | 0 | 3,292 | 0 | 487 | 31,426 |
| Other Hydrocarbons and Alcohol | 620 | 0 | 0 | -2 | 0 | 0 | 0 | 618 | 0 | 0 | 9 |
| Unfinished Oils | 0 | 0 | 0 | 1,004 | 0 | 133 | 0 | 1,646 | 0 | -509 | 23,734 |
| Motor Gasoline Blending Components | 0 | 0 | 665 | 1,344 | 0 | 0 | 0 | 1,013 | 0 | 996 | 7,643 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 15 | 0 | 0 | 40 |
| **Finished Petroleum Products** | 0 | 69,926 | 1,461 | -1,690 | 0 | 3,210 | 0 | 0 | 5,569 | 67,338 | 55,901 |
| Finished Motor Gasoline | 0 | 30,219 | 417 | 504 | 0 | 1,252 | 0 | 0 | 245 | 32,147 | 21,358 |
| Finished Leaded Motor Gasoline | 0 | 13,172 | 28 | 346 | 0 | 762 | 0 | 0 | 245 | 14,063 | 9,549 |
| Finished Unleaded Motor Gasoline | 0 | 17,047 | 389 | 158 | 0 | 490 | 0 | 0 | 0 | 18,084 | 11,809 |
| Finished Aviation Gasoline | 0 | 331 | 0 | -72 | 0 | 0 | 0 | 0 | 0 | 259 | 567 |
| Naphtha-Type Jet Fuel | 0 | 1,543 | 0 | -316 | 0 | 307 | 0 | 0 | 0 | 1,534 | 1,914 |
| Kerosene-Type Jet Fuel | 0 | 7,420 | 94 | -603 | 0 | 178 | 0 | 0 | 29 | 7,059 | 6,165 |
| Kerosene | 0 | 200 | (s) | -45 | 0 | 0 | 0 | 0 | (s) | 155 | 385 |
| Distillate Fuel Oil | 0 | 11,403 | 51 | -160 | 0 | 564 | 0 | 0 | 768 | 11,090 | 10,777 |
| Residual Fuel Oil | 0 | 8,775 | 838 | -1,267 | 0 | 936 | 0 | 0 | 2,155 | 7,126 | 8,403 |
| Naphtha and Other Oils for Petro. Feed. | 0 | 556 | 0 | -105 | 0 | 0 | 0 | 0 | 6 | 445 | 735 |
| Special Naphthas | 0 | 109 | 15 | -16 | 0 | 0 | 0 | 0 | 1 | 107 | 327 |
| Lubricants | 0 | 354 | 9 | 98 | 0 | 10 | 0 | 0 | 59 | 412 | 1,223 |
| Waxes | 0 | 55 | 14 | -1 | 0 | 0 | 0 | 0 | 6 | 62 | 54 |
| Petroleum Coke | 0 | 2,935 | 0 | -37 | 0 | 0 | 0 | 0 | 2,294 | 604 | 2,091 |
| Asphalt and Road Oil | 0 | 2,357 | 12 | 346 | 0 | 0 | 0 | 0 | 1 | 2,715 | 1,651 |
| Still Gas | 0 | 3,469 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,469 | 0 |
| Miscellaneous Products | 0 | 200 | 11 | -16 | 0 | -37 | 0 | 0 | 5 | 153 | 251 |
| **Total** | 86,762 | 71,046 | 8,980 | 338 | -587 | -17,028 | 20 | 67,465 | 10,451 | 71,574 | 175,335 |

1 Unaccounted for crude oil is a balancing item.
2 Includes natural gasoline, isopentane, unfractionated stream, and plant condensate.
(s) Less than 500 barrels.
E =Estimated.
Note: Total may not equal sum of components due to independent rounding.
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

## Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month,[1] July 1983 (Thousand Barrels)

| PAD District and State | Production | |
|---|---|---|
| | Total | Daily Average |
| **PAD District I** | | |
| Florida | 1,538 | 50 |
| New York | E 71 | 2 |
| Pennsylvania | E 364 | 12 |
| Virginia | E 4 | (s) |
| West Virginia | 304 | 10 |
| Adjustment [2] | 264 | 9 |
| **Total PAD District I** | E 2,545 | 82 |
| **PAD District II** | | |
| Illinois | 2,540 | 82 |
| Indiana | 434 | 14 |
| Kansas | 6,063 | 196 |
| Kentucky | 620 | 20 |
| Michigan | 2,579 | 83 |
| Missouri | E 17 | 1 |
| Nebraska | 543 | 18 |
| North Dakota | 4,247 | 137 |
| Ohio | E 1,238 | 40 |
| Oklahoma | 12,823 | 414 |
| South Dakota | 98 | 3 |
| Tennessee | 92 | 3 |
| Adjustment [2] | 865 | 28 |
| **Total PAD District II** | E 32,159 | 1,037 |
| **PAD District III** | | |
| Alabama | 1,596 | 51 |
| Arkansas | E 1,601 | 52 |
| Louisiana | | |
| Gulf Coast | E 37,453 | 1,208 |
| Rest Of State | 2,835 | 91 |
| Total Louisiana | E 40,288 | 1,300 |
| Mississippi | 2,623 | 85 |
| New Mexico | | |
| Northwestern | 496 | 16 |
| Southeastern | 5,770 | 186 |
| Total New Mexico | 6,266 | 202 |
| Texas | | |
| TRRC District 01 | 2,087 | 67 |
| TRRC District 02 | 3,445 | 111 |
| TRRC District 03 | E 10,842 | 350 |
| TRRC District 04 | 2,345 | 76 |
| TRRC District 05 | 786 | 25 |
| TRRC District 06, excluding East Texas | 3,536 | 114 |
| TRRC District 07B | 2,878 | 93 |
| TRRC District 07C | 2,884 | 93 |
| TRRC District 08 | 19,350 | 624 |
| TRRC District 08A | 19,025 | 614 |
| TRRC District 09 | 3,143 | 101 |
| TRRC District 10 | 1,803 | 58 |
| East Texas | 4,289 | 138 |
| Total Texas | E 76,413 | 2,465 |
| Adjustment [2] | -416 | -13 |
| **Total PAD District III** | E 128,371 | 4,141 |

See footnotes at end of table.

—Continued

| PAD District and State | Production | |
|---|---|---|
| | Total | Daily Average |
| **PAD District IV** | | |
| Colorado | E 2,337 | 75 |
| Montana | E 2,626 | 85 |
| Utah | E 2,446 | 79 |
| Wyoming | E 9,607 | 310 |
| Adjustment [2] | 555 | 18 |
| **Total PAD District IV** | E 17,571 | 567 |
| **PAD District V** | | |
| Alaska | | |
| South Alaska | 2,069 | 67 |
| North Slope | 51,107 | 1,649 |
| Adjustment for Alaska[2] | -327 | -11 |
| Total Alaska | 52,849 | 1,705 |
| Arizona | 20 | 1 |
| California | | |
| Central Coastal | 6,358 | 205 |
| East Central | 21,504 | 694 |
| North | 15 | (s) |
| South | 6,631 | 214 |
| Total California | 34,508 | 1,113 |
| Nevada | 49 | 2 |
| Adjustment for Arizona, California, and Nevada[2] | -24 | -1 |
| **Total PAD District V** | 87,402 | 2,819 |
| **United States Total** | E 268,048 | 8,647 |

1 Includes the following offshore production (thousands of barrels):
Alaska: 1,798;
California: Federal- 2,628, State- 3,067;
Louisiana: Federal- E 25,111, State- 2,112;
Texas: Federal- E 1,675, State- 226;
U.S. Total- E 36,617.

2 These adjustments are used to reconcile the national and PADD level sums of the State data with the independently estimated U.S. and Alaskan figures shown in the Summary Statistics portion of this issue and with the PADD level figures published in a previous issue. Final data at the State, PAD District and national levels will be published without adjustments in the Petroleum Supply Annual.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

E = Estimated.

**Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District,[1] September 1983**
**(Thousand Barrels)**

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian #1 | Total | Appala-chian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Natural Gas Liquids | 462 | 380 | 842 | 2 | 1,886 | 445 | 6,629 | 8,962 | 19,897 | 3,005 | 7,316 | 652 | 3,523 | 34,393 | 2,329 | 1,041 | 47,567 |
| Natural Gasoline and Isopentane | 49 | 41 | 90 | 0 | 58 | 68 | 1,319 | 1,445 | 1,876 | 3,556 | 1,240 | 120 | 321 | 7,113 | 326 | 454 | 9,428 |
| Unfractionated Stream | 0 | 30 | 30 | 2 | 892 | 93 | -1,828 | -841 | 10,824 | -14,179 | 354 | -3 | 2,187 | -817 | 1,149 | -3 | -482 |
| Plant Condensate | 0 | 0 | 0 | 0 | 21 | 24 | 47 | 92 | 172 | 329 | 23 | 17 | 7 | 548 | 152 | 0 | 792 |
| Liquefied Petroleum Gases | 413 | 309 | 722 | 0 | 915 | 260 | 7,091 | 8,266 | 7,025 | 13,299 | 5,699 | 518 | 1,008 | 27,549 | 702 | 590 | 37,829 |
| Ethane | 142 | 157 | 299 | 0 | 436 | 0 | 1,292 | 1,728 | 802 | 3,059 | 2,005 | 31 | 84 | 5,981 | 16 | 0 | 8,024 |
| Propane | 163 | 107 | 270 | 0 | 360 | 159 | 2,626 | 3,145 | 2,407 | 3,672 | 1,812 | 140 | 445 | 8,476 | 443 | 344 | 12,678 |
| Butane | 89 | 29 | 118 | 0 | 71 | 90 | 1,010 | 1,171 | 1,375 | 2,079 | 689 | 214 | 236 | 4,593 | 237 | 205 | 6,324 |
| Butane-Propane Mixtures | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 52 | 42 | 0 | 9 | 0 | 103 | 0 | 30 | 139 |
| Ethane-Propane Mixtures | 0 | 0 | 0 | 0 | 0 | 0 | 1,743 | 1,743 | 2,117 | 3,393 | 595 | 0 | 164 | 6,269 | 0 | 0 | 8,012 |
| Isobutane | 19 | 16 | 35 | 0 | 48 | 11 | 414 | 473 | 272 | 1,054 | 598 | 124 | 79 | 2,127 | 6 | 11 | 2,652 |
| Finished Petroleum Products | 41 | 0 | 41 | 0 | 1 | 0 | 5 | 6 | 293 | 6 | 0 | 5 | 3 | 307 | 9 | 0 | 363 |
| Finished Motor Gasoline | 41 | 0 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 48 |
| Finished Leaded Motor Gasoline | 25 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 32 |
| Finished Unleaded Motor Gasoline | 16 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159 | 0 | 0 | 0 | 0 | 159 | 0 | 0 | 159 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 3 |
| Distillate Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 0 | 0 | 0 | 0 | 97 | 0 | 0 | 97 |
| Miscellaneous Products | 0 | 0 | 0 | 0 | 1 | 0 | 5 | 6 | 36 | 6 | 0 | 4 | 1 | 47 | 2 | 0 | 55 |
| **Total Production** | 503 | 380 | 883 | 2 | 1,887 | 445 | 6,634 | 8,968 | 20,190 | 3,011 | 7,316 | 657 | 3,526 | 34,700 | 2,338 | 1,041 | 47,930 |

[1] Production represents quantity of natural gas processing plant output less input to fractionating facilities.
Source: See Explanatory Notes on Data Collection and Estimation.

**Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, September 1983**
**(Thousand Barrels, Except Where Noted)**

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian #1 | Total | Appala-chian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Crude Oil (including lease condensate) | 32,674 | 1,477 | 34,151 | 1,878 | 57,492 | 7,741 | 18,848 | 85,959 | 14,814 | 91,735 | 62,220 | 4,971 | 2,278 | 176,018 | 13,618 | 63,594 | 373,340 |
| Natural Gas Liquids | | | | | | | | | | | | | | | | | |
| Natural Gasoline and Isopentane | 29 | 0 | 29 | 0 | 437 | 235 | 880 | 1,552 | 998 | 2,145 | 478 | 40 | 103 | 3,764 | 114 | 273 | 5,732 |
| Unfractionated Stream | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Plant Condensate | 0 | 0 | 0 | 0 | 103 | 0 | 9 | 112 | 0 | 611 | 9 | 177 | 1 | 798 | 67 | 0 | 977 |
| Liquefied Petroleum Gases | 65 | 0 | 65 | 124 | 1,551 | 264 | 749 | 2,688 | 495 | 1,621 | 1,451 | 87 | 30 | 3,684 | 350 | 306 | 7,093 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 0 | 0 | 69 | 0 | 0 | 69 |
| Propane | 0 | 0 | 0 | 0 | 64 | 23 | 0 | 87 | 0 | 3 | 35 | 0 | 0 | 38 | 8 | 0 | 133 |
| Butane | 0 | 0 | 0 | 54 | 771 | 181 | 375 | 1,381 | 159 | 1,248 | 604 | 6 | 0 | 2,017 | 206 | 171 | 3,775 |
| Butane-Propane Mixtures | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 90 | 36 | 0 | 4 | 130 | 84 | 44 | 261 |
| Ethane-Propane Mixtures | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Isobutane | 65 | 0 | 65 | 70 | 713 | 60 | 374 | 1,217 | 336 | 280 | 707 | 81 | 26 | 1,430 | 52 | 91 | 2,855 |
| Other Liquids | | | | | | | | | | | | | | | | | |
| Other Hydrocarbons and Alcohol | 113 | 0 | 113 | 0 | 348 | 0 | 19 | 367 | 34 | 366 | 206 | 0 | 2 | 608 | 1 | 618 | 1,707 |
| Unfinished Oil (net) | 2,429 | –128 | 2,301 | 46 | 449 | –135 | 679 | 1,039 | 309 | 4,469 | 507 | 192 | 101 | 5,578 | –649 | 1,646 | 9,915 |
| Motor Gasoline Blending Components (net) | –133 | 18 | –115 | –6 | 555 | 23 | 1,131 | 1,703 | –450 | 1,492 | 1,035 | 22 | –37 | 2,062 | –10 | 1,013 | 4,653 |
| Aviation Gasoline Blending Components (net) | –7 | 0 | –7 | 0 | 4 | 0 | –14 | –10 | 0 | 2 | 46 | 0 | 0 | 48 | 0 | 15 | 46 |
| Total Input to Refineries | 35,170 | 1,367 | 36,537 | 2,042 | 60,939 | 8,128 | 22,301 | 93,410 | 16,200 | 102,441 | 65,952 | 5,489 | 2,478 | 192,560 | 13,491 | 67,465 | 403,463 |
| **Crude Oil Distillation** | | | | | | | | | | | | | | | | | |
| Gross Input (daily average) | 1,110 | 49 | 1,159 | 68 | 1,945 | 270 | 635 | 2,919 | 505 | 3,169 | 1,848 | 176 | 77 | 5,775 | 458 | 2,148 | 12,457 |
| Operable Capacity (daily average) | 1,473 | 174 | 1,647 | 66 | 2,351 | 295 | 804 | 3,515 | 611 | 3,902 | 2,532 | 295 | 107 | 7,447 | 559 | 3,109 | 16,278 |
| Operating Ratio (percent)[1] | 75.3 | 28.2 | 70.4 | 103.4 | 82.7 | 91.5 | 79.0 | 83.0 | 82.7 | 81.2 | 73.0 | 59.6 | 71.7 | 77.5 | 81.9 | 69.1 | 76.5 |
| **Crude Oil Qualities** | | | | | | | | | | | | | | | | | |
| Sulfur Content, Weighted Average (percent) | 1.09 | .13 | 1.05 | .81 | .93 | 1.51 | .57 | .90 | .65 | .88 | .93 | 1.39 | .70 | .89 | .91 | 1.00 | .93 |
| API Gravity, Weighted Average | 31.31 | 42.49 | 31.77 | 35.76 | 35.61 | 31.63 | 37.49 | 35.67 | 37.29 | 35.17 | 33.59 | 31.57 | 39.59 | 34.74 | 35.24 | 25.85 | 33.16 |
| **Operable Capacity (daily average)** | 1,473 | 174 | 1,647 | 66 | 2,351 | 295 | 804 | 3,515 | 611 | 3,902 | 2,532 | 295 | 107 | 7,447 | 559 | 3,109 | 16,278 |
| Operating | 1,330 | 50 | 1,380 | 66 | 2,170 | 295 | 685 | 3,215 | 573 | 3,543 | 2,268 | 227 | 107 | 6,717 | 536 | 2,886 | 14,735 |
| Idle | 143 | 124 | 267 | 0 | 181 | 0 | 119 | 300 | 38 | 359 | 264 | 68 | 0 | 730 | 23 | 223 | 1,543 |

[1] Represents gross input divided by operable capacity.
Note: Total may not equal sum of components due to independent rounding.
Source: See Explanatory Notes on Data Collection and Estimation.

**Table 14. Refinery Production of Petroleum Products by PAD District, September 1983**
**(Thousand Barrels)**

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian #1 | Total | Appalachian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Liquefied Refinery Gases | 1,217 | 0 | 1,217 | 36 | 1,787 | 182 | 355 | 2,360 | 223 | 2,774 | 2,907 | 62 | 95 | 6,061 | 154 | 1,120 | 10,912 |
| For Petrochemical Feedstock Use | 400 | 0 | 400 | 0 | 197 | 0 | 43 | 240 | 36 | 1,293 | 1,626 | 16 | 0 | 2,971 | -6 | 172 | 3,777 |
| For Other Uses | 817 | 0 | 817 | 36 | 1,590 | 182 | 312 | 2,120 | 187 | 1,481 | 1,281 | 46 | 95 | 3,090 | 160 | 948 | 7,135 |
| Ethane | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 563 | 10 | 0 | 0 | 573 | 0 | 0 | 573 |
| For Petrochemical Feedstock Use | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 369 | 2 | 0 | 0 | 371 | 0 | 0 | 371 |
| For Other Uses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 8 | 0 | 0 | 202 | 0 | 0 | 202 |
| Propane | 1,016 | 0 | 1,016 | 36 | 1,752 | 186 | 490 | 2,464 | 188 | 2,119 | 1,407 | 30 | 58 | 3,802 | 180 | 758 | 8,220 |
| For Petrochemical Feedstock Use | 319 | 0 | 319 | 0 | 197 | 0 | 43 | 240 | 36 | 751 | 165 | 0 | 0 | 952 | 0 | 159 | 1,670 |
| For Other Uses | 697 | 0 | 697 | 36 | 1,555 | 186 | 447 | 2,224 | 152 | 1,368 | 1,242 | 30 | 58 | 2,850 | 180 | 599 | 6,550 |
| Butane | 201 | 0 | 201 | 0 | 31 | -4 | -135 | -108 | 33 | -11 | 1,489 | 30 | 17 | 1,558 | -8 | 292 | 1,935 |
| For Petrochemical Feedstock Use | 81 | 0 | 81 | 0 | 0 | 0 | 0 | 0 | 0 | 168 | 1,459 | 16 | 0 | 1,643 | 0 | 13 | 1,737 |
| For Other Uses | 120 | 0 | 120 | 0 | 31 | -4 | -135 | -108 | 33 | -179 | 30 | 14 | 17 | -85 | -8 | 279 | 198 |
| Butane-Propane Mixtures | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 2 | 98 | 1 | 2 | 20 | 123 | -12 | 70 | 185 |
| For Petrochemical Feedstock Use | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| For Other Uses | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 2 | 98 | 1 | 2 | 20 | 123 | -12 | 70 | 185 |
| Isobutane for Petro. Feed. Use | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 | -6 | 0 | -1 |
| Finished Motor Gasoline | 17,354 | 219 | 17,573 | 1,081 | 35,280 | 4,274 | 13,266 | 53,901 | 8,342 | 46,405 | 31,623 | 1,507 | 1,030 | 88,907 | 6,804 | 30,219 | 197,404 |
| Finished Leaded Motor Gasoline | 6,209 | 145 | 6,354 | 514 | 14,118 | 2,218 | 7,430 | 24,280 | 4,324 | 19,381 | 12,103 | 703 | 610 | 37,121 | 4,224 | 13,172 | 85,151 |
| Finished Unleaded Motor Gasoline | 11,145 | 74 | 11,219 | 567 | 21,162 | 2,056 | 5,836 | 29,621 | 4,018 | 27,024 | 19,520 | 804 | 420 | 51,786 | 2,580 | 17,047 | 112,253 |
| Finished Aviation Gasoline | 1 | 0 | 1 | 0 | 83 | 0 | 9 | 92 | 17 | 221 | 122 | 0 | 0 | 360 | 23 | 331 | 807 |
| Naphtha-Type Jet Fuel | 352 | 46 | 398 | 94 | 378 | 85 | 325 | 882 | 681 | 1,023 | 449 | 192 | 402 | 2,747 | 363 | 1,543 | 5,933 |
| Kerosene-Type Jet Fuel | 1,107 | 0 | 1,107 | 3 | 2,668 | 428 | 418 | 3,517 | 694 | 6,821 | 6,618 | 5 | 12 | 14,150 | 685 | 7,420 | 26,879 |
| Kerosene | 29 | 19 | 48 | 100 | 390 | 51 | 164 | 705 | 36 | 1,422 | 1,043 | 32 | 30 | 2,563 | -3 | 200 | 3,513 |
| Distillate Fuel Oil | 7,439 | 431 | 7,870 | 478 | 12,138 | 1,757 | 5,589 | 19,962 | 3,063 | 21,054 | 12,472 | 1,545 | 746 | 38,880 | 3,629 | 11,403 | 81,744 |
| Residual Fuel Oil | 2,379 | 41 | 2,420 | 80 | 1,300 | 176 | 270 | 1,826 | 635 | 7,619 | 2,494 | 287 | 47 | 11,082 | 345 | 8,775 | 24,448 |
| Naphtha < 400 Deg. For Petro. Feed. Use | 329 | 0 | 329 | 0 | 796 | 0 | 86 | 882 | 535 | 2,528 | 255 | 87 | 0 | 3,405 | 0 | 159 | 4,775 |
| Other Oils > 400 Deg. For Petro. Feed. Use | 5 | 0 | 5 | 0 | 159 | 0 | 1 | 160 | 216 | 4,747 | 2,053 | 0 | 0 | 7,016 | 0 | 397 | 7,578 |
| Special Naphthas | 4 | 28 | 32 | 0 | 314 | 0 | 164 | 478 | 20 | 852 | 60 | 164 | 0 | 1,096 | 3 | 109 | 1,718 |
| Lubricants | 330 | 366 | 696 | 0 | 422 | 0 | 258 | 680 | 2 | 1,788 | 800 | 331 | 0 | 2,921 | 21 | 354 | 4,672 |
| Waxes | 23 | 72 | 95 | 0 | 9 | 0 | 21 | 30 | 5 | 101 | 65 | 64 | 0 | 235 | 10 | 55 | 425 |
| Petroleum Coke | 1,213 | 0 | 1,213 | 21 | 2,232 | 278 | 642 | 3,173 | 298 | 2,656 | 2,238 | 64 | 11 | 5,267 | 297 | 2,935 | 12,885 |
| Marketable | 462 | 0 | 462 | 0 | 1,222 | 157 | 465 | 1,844 | 62 | 1,262 | 1,419 | 56 | 0 | 2,799 | 135 | 2,207 | 7,447 |
| Catalyst | 751 | 0 | 751 | 21 | 1,010 | 121 | 177 | 1,329 | 236 | 1,394 | 819 | 8 | 11 | 2,468 | 162 | 728 | 5,438 |
| Asphalt and Road Oil | 3,038 | 0 | 3,038 | 150 | 2,653 | 818 | 491 | 4,112 | 631 | 718 | 2,393 | 967 | 95 | 4,804 | 833 | 2,357 | 15,144 |
| Still Gas | 1,718 | 29 | 1,747 | 57 | 2,967 | 256 | 726 | 4,006 | 454 | 4,735 | 2,550 | 203 | 43 | 7,985 | 529 | 3,469 | 17,736 |
| For Petrochemical Feedstock Use | 293 | 0 | 293 | 0 | 2 | 0 | 0 | 2 | 6 | 553 | 91 | 0 | 0 | 650 | 33 | 9 | 987 |
| For Other Uses | 1,425 | 29 | 1,454 | 57 | 2,965 | 256 | 726 | 4,004 | 448 | 4,182 | 2,459 | 203 | 43 | 7,335 | 496 | 3,460 | 16,749 |
| Miscellaneous Products | 177 | 40 | 217 | 3 | 94 | 18 | 55 | 170 | 70 | 819 | 374 | 51 | 0 | 1,314 | 30 | 200 | 1,931 |
| Fuel Use | 0 | 13 | 13 | 0 | 0 | 0 | 10 | 10 | 0 | 4 | 249 | 0 | 0 | 253 | 1 | 27 | 304 |
| Non-Fuel Use | 177 | 27 | 204 | 3 | 94 | 18 | 45 | 160 | 70 | 815 | 125 | 51 | 0 | 1,061 | 29 | 173 | 1,627 |
| **Total Production** | 36,715 | 1,291 | 38,006 | 2,103 | 63,670 | 8,323 | 22,840 | 96,936 | 15,922 | 106,283 | 68,516 | 5,561 | 2,511 | 198,793 | 13,723 | 71,046 | 418,504 |
| **Processing Gain(-) or Loss(+)[1]** | -1,545 | 76 | -1,469 | -61 | -2,731 | -195 | -539 | -3,526 | 278 | -3,842 | -2,564 | -72 | -33 | -6,233 | -232 | -3,581 | -15,041 |

[1] Represents the arithmetic difference between input and output.
Note: See Explanatory Note on negative production.
Source: See Explanatory Notes on Data Collection and Estimation.

## Table 15. Percent Refinery Yield of Petroleum Products by PAD District,[1] September 1983

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian #1 | Total | Appala-chian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| Finished Motor Gasoline[2] | 49.2 | 14.9 | 48.0 | 50.1 | 55.7 | 49.3 | 53.7 | 54.6 | 48.0 | 41.8 | 45.3 | 22.9 | 39.1 | 42.9 | 48.4 | 42.9 | 46.2 |
| Finished Aviation Gasoline[3] | .0 | .0 | .0 | .0 | .1 | .0 | .1 | .1 | .1 | .2 | .1 | .0 | .0 | .2 | .2 | .5 | .2 |
| Liquefied Refinery Gases | 3.5 | .0 | 3.3 | 1.9 | 3.1 | 2.4 | 1.8 | 2.7 | 1.5 | 2.9 | 4.6 | 1.2 | 4.0 | 3.3 | 1.2 | 1.7 | 2.8 |
| Naphtha-Type Jet Fuel | 1.0 | 3.4 | 1.1 | 4.9 | .7 | 1.1 | 1.7 | 1.0 | 4.5 | 1.1 | .7 | 3.7 | 16.9 | 1.5 | 2.8 | 2.4 | 1.5 |
| Kerosene-Type Jet Fuel | 3.2 | 0 | 3.0 | .2 | 4.6 | 5.6 | 2.1 | 4.0 | 4.6 | 7.1 | 10.6 | .1 | .5 | 7.8 | 5.3 | 11.4 | 7.0 |
| Kerosene | .1 | 1.4 | .1 | 5.2 | .7 | .7 | .8 | .8 | .2 | 1.5 | 1.7 | .6 | 1.3 | 1.4 | .0 | .3 | .9 |
| Distillate Fuel Oil | 21.2 | 31.9 | 21.6 | 24.8 | 20.9 | 23.1 | 28.6 | 22.9 | 20.3 | 21.9 | 19.9 | 29.9 | 31.4 | 21.4 | 28.0 | 17.5 | 21.3 |
| Residual Fuel Oil | 6.8 | 3.0 | 6.6 | 4.2 | 2.2 | 2.3 | 1.4 | 2.1 | 4.2 | 7.9 | 4.0 | 5.6 | 2.0 | 6.1 | 2.7 | 13.5 | 6.4 |
| Naphtha < 400 Deg. F. Petro. Feed. Use | .9 | 0 | .9 | 0 | 1.4 | 0 | .4 | 1.0 | 3.5 | 2.6 | .4 | 1.7 | 0 | 1.9 | 0 | .2 | 1.2 |
| Other Oils > 400 Deg. F. Petro. Feed. Use | .0 | 0 | .0 | 0 | .3 | 0 | .0 | .2 | 1.4 | 4.9 | 3.3 | 0 | 0 | 3.9 | .0 | .6 | 2.0 |
| Special Naphthas | .0 | 2.1 | .1 | 0 | .5 | 0 | .8 | .5 | .1 | .9 | .1 | 3.2 | 0 | .6 | .0 | .2 | .4 |
| Lubricants | .9 | 27.1 | 1.9 | 0 | .7 | 0 | 1.3 | .8 | .0 | 1.9 | 1.3 | 6.4 | 0 | 1.6 | .2 | .5 | 1.2 |
| Waxes | .1 | 5.3 | .3 | 0 | .0 | 0 | .1 | .0 | .0 | .1 | .1 | 1.2 | 0 | .1 | .1 | .1 | .1 |
| Petroleum Coke | 3.5 | 0 | 3.3 | 1.1 | 3.9 | 3.7 | 3.3 | 3.6 | 2.0 | 2.8 | 3.6 | 1.2 | .5 | 2.9 | 2.3 | 4.5 | 3.4 |
| Asphalt and Road Oil | 8.7 | .0 | 8.3 | 7.8 | 4.6 | 10.8 | 2.5 | 4.7 | 4.2 | .7 | 3.8 | 18.7 | 4.0 | 2.6 | 6.4 | 3.6 | 4.0 |
| Still Gas | 4.9 | 2.1 | 4.8 | 3.0 | 5.1 | 3.4 | 3.7 | 4.6 | 3.0 | 4.9 | 4.1 | 3.9 | 1.8 | 4.4 | 4.1 | 5.3 | 4.6 |
| Miscellaneous Products | .5 | 3.0 | .6 | .2 | .2 | .2 | .3 | .2 | .5 | .9 | .6 | 1.0 | 0 | .7 | .2 | .3 | .5 |
| Processing Gain(-) or Loss(+)[4] | –4.4 | 5.6 | –4.0 | –3.2 | –4.7 | –2.6 | –2.8 | –4.1 | 1.8 | –4.0 | –4.1 | –1.4 | –1.4 | –3.4 | –1.8 | –5.5 | –3.9 |

1 Based on crude oil input and net reruns of unfinished oils.
2 Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol.
3 Based on finished aviation gasoline output plus net output of aviation gasoline blending components.
4 Represents the difference between Input and Production.
Note: Totals may not equal sum of components due to independent rounding.
Note: See Explanatory Note on negative production.
Source: See Explanatory Notes on Data Collection and Estimation.

## Table 16. Imports of Crude Oil and Petroleum Products by PAD District, September 1983
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | |
|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total |
| **Crude Oil (including lease condensate)** [1] [2] | 27,455 | 24,575 | 67,158 | 1,182 | 6,248 | 126,619 |
| **Natural Gas Liquids** | 418 | 4,127 | 374 | 395 | 605 | 5,919 |
| Natural Gasoline and Isopentane | 0 | 0 | 0 | 0 | 437 | 437 |
| Plant Condensate | 84 | 0 | 0 | 54 | 0 | 138 |
| Liquefied Petroleum Gases | 334 | 4,127 | 374 | 341 | 168 | 5,344 |
| Ethane | 0 | 1,431 | 0 | 0 | 0 | 1,431 |
| Propane | 217 | 912 | 0 | 165 | 50 | 1,345 |
| Butane | 118 | 625 | 0 | 176 | 117 | 1,035 |
| Butane-Propane Mixtures | 0 | 0 | 374 | 0 | 0 | 374 |
| Ethane-Propane Mixtures | 0 | 1,159 | 0 | 0 | 0 | 1,159 |
| **Other Liquids** [1] | 4,452 | 503 | 4,165 | 91 | 665 | 9,876 |
| Unfinished Oils [1] | 4,132 | 403 | 4,009 | 91 | 0 | 8,636 |
| Motor Gasoline Blending Components | 319 | 100 | 156 | 0 | 665 | 1,241 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 |
| **Finished Petroleum Products** | 33,935 | 604 | 4,067 | 149 | 1,461 | 40,217 |
| Finished Motor Gasoline | 7,306 | 73 | 714 | 54 | 417 | 8,564 |
| Finished Leaded Motor Gasoline | 4,494 | 65 | 460 | 54 | 28 | 5,101 |
| Finished Unleaded Motor Gasoline | 2,812 | 8 | 254 | 0 | 389 | 3,463 |
| Finished Aviation Gasoline | 1 | 0 | 0 | 0 | 0 | 1 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 967 | 0 | 176 | 0 | 94 | 1,237 |
| Bonded Aircraft Fuel | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 967 | 0 | 176 | 0 | 94 | 1,237 |
| Kerosene | 300 | 1 | (s) | 0 | (s) | 301 |
| Distillate Fuel Oil | 6,464 | 175 | 846 | 63 | 51 | 7,599 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 6,464 | 175 | 846 | 63 | 51 | 7,599 |
| Residual Fuel Oil | 17,868 | 299 | 1,663 | 31 | 838 | 20,698 |
| Bonded Ships Bunkers | 0 | 0 | 0 | 0 | 0 | 0 |
| Other | 17,868 | 299 | 1,663 | 31 | 838 | 20,698 |
| Naphtha < 400 Deg. for Petro. Feed. Use | 18 | 2 | 22 | 0 | 0 | 42 |
| Other Oils > 400 Deg. for Petro. Feed. Use | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 128 | 38 | 595 | 0 | 15 | 776 |
| Lubricants | 207 | 9 | 23 | (s) | 9 | 248 |
| Waxes | 7 | 2 | 22 | 0 | 14 | 44 |
| Asphalt and Road Oil | 377 | 1 | 0 | 0 | 12 | 391 |
| Miscellaneous Products | 292 | 4 | 8 | (s) | 11 | 316 |
| **Total Imports** | 66,260 | 29,809 | 75,764 | 1,818 | 8,980 | 182,631 |

[1] Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry.
[2] Includes crude oil imported for storage in the Strategic Petroleum Reserve.
(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

## Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1983
(Thousand Barrels)

| Source | Crude Oil 1 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 2 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All PAD Districts | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 9,455 | 0 | 335 | 0 | 0 | 0 | 0 | 687 | 1,927 | 0 | 0 | 2,949 | 12,404 | 413 |
| Iraq | 771 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 771 | 26 |
| Kuwait | 0 | 0 | 294 | 0 | 0 | 0 | 0 | 0 | 521 | 0 | 0 | 815 | 815 | 27 |
| Qatar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Saudi Arabia | 16,657 | 0 | 0 | 319 | 0 | 0 | 0 | 0 | 620 | 0 | (s) | 939 | 17,596 | 587 |
| United Arab Emirates | 352 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 644 | 21 |
| Subtotal Arab OPEC | 27,235 | 0 | 629 | 319 | 0 | 0 | 0 | 687 | 3,069 | 0 | 294 | 4,998 | 32,233 | 1,074 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,472 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 | 0 | 0 | 186 | 1,658 | 55 |
| Gabon | 2,984 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,984 | 99 |
| Indonesia | 14,405 | 0 | 0 | 0 | 240 | 28 | 0 | 0 | 373 | 0 | 437 | 1,079 | 15,483 | 516 |
| Iran | 2,583 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,583 | 86 |
| Nigeria | 9,707 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 9,714 | 324 |
| Venezuela | 7,345 | 0 | 0 | 0 | 1,445 | 215 | 0 | 2,041 | 2,925 | 181 | 0 | 6,807 | 14,152 | 472 |
| Subtotal Other OPEC | 38,495 | 0 | 0 | 0 | 1,686 | 243 | 0 | 2,041 | 3,491 | 181 | 437 | 8,079 | 46,574 | 1,552 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 2,888 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 257 | 0 | 0 | 257 | 3,145 | 105 |
| Australia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 22 | 22 | 1 |
| Bahamas | 0 | 0 | 2,251 | 0 | 0 | 253 | 0 | 758 | 653 | 193 | 0 | 4,109 | 4,109 | 137 |
| Brazil | 0 | 0 | 0 | 0 | 1,466 | 0 | 0 | 0 | 492 | 0 | 0 | 1,958 | 1,958 | 65 |
| Canada | 8,130 | 4,863 | 380 | 100 | 436 | 0 | 18 | 713 | 690 | 61 | 292 | 7,554 | 15,684 | 523 |
| Congo | 848 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 344 | 0 | 0 | 344 | 1,192 | 40 |
| Egypt | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 0 | 200 | 200 | 7 |
| Malaysia | 0 | 0 | 0 | 0 | 123 | 12 | 0 | 0 | 2 | 0 | 0 | 137 | 137 | 5 |
| Mexico | 23,288 | 374 | 208 | 0 | 488 | 176 | (s) | 385 | 18 | 2 | 21 | 1,672 | 24,960 | 832 |
| Netherlands | 0 | (s) | 0 | 36 | 679 | 0 | 0 | 573 | 0 | 95 | (s) | 1,382 | 1,382 | 46 |
| Netherlands Antilles | 0 | 0 | 2,331 | 0 | 150 | 0 | 0 | 213 | 4,557 | 0 | 283 | 7,536 | 7,536 | 251 |
| Norway | 2,314 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,314 | 77 |
| Oman | 3,947 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,947 | 132 |
| People's Republic of China | 0 | 0 | 0 | 786 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 786 | 786 | 26 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 523 | 0 | 0 | 523 | 523 | 17 |
| Puerto Rico | 0 | 0 | 230 | 0 | 204 | 0 | 282 | 0 | 0 | 128 | 158 | 1,001 | 1,001 | 33 |
| Romania | 0 | 0 | 0 | 0 | 467 | 0 | 0 | 274 | 0 | 0 | 0 | 740 | 740 | 25 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 64 | 64 | 2 |
| Trinidad and Tobago | 2,209 | 0 | 0 | 0 | 0 | 0 | 0 | 219 | (s) | 29 | 17 | 265 | 2,475 | 82 |
| United Kingdom | 13,562 | 107 | 0 | 0 | 133 | 0 | 0 | 0 | 323 | 0 | 40 | 604 | 14,165 | 472 |
| Virgin Islands | 0 | 0 | 2,469 | 0 | 2,223 | 0 | 0 | 965 | 3,567 | 10 | 0 | 9,235 | 9,235 | 308 |
| Zaire | 476 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 476 | 16 |
| Other Western Hemisphere | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,008 | 31 | 0 | 1,039 | 1,039 | 35 |
| Other Eastern Hemisphere | 3,227 | 0 | 136 | 0 | 510 | 553 | 0 | 771 | 1,440 | 47 | 51 | 3,509 | 6,736 | 225 |
| Subtotal Other | 60,889 | 5,344 | 8,006 | 921 | 6,879 | 994 | 301 | 4,872 | 14,138 | 596 | 886 | 42,935 | 103,825 | 3,461 |
| **Total Imports** | 126,619 | 5,344 | 8,636 | 1,241 | 8,564 | 1,237 | 301 | 7,599 | 20,698 | 776 | 1,617 | 56,012 | 182,632 | 6,088 |

See footnotes at end of table.

**Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1983**
**(Thousand Barrels)**
**(continued)**

| Source | Crude Oil [1] | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products [2] | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PAD District I | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 2,781 | 0 | 0 | 0 | 0 | 0 | 0 | 687 | 1,582 | 0 | 0 | 2,269 | 5,050 | 168 |
| Kuwait | 0 | 0 | 294 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 294 | 294 | 10 |
| Saudi Arabia | 2,893 | 0 | 0 | 319 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 319 | 3,212 | 107 |
| United Arab Emirates | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 292 | 292 | 10 |
| Subtotal Arab OPEC | 5,674 | 0 | 294 | 319 | 0 | 0 | 0 | 687 | 1,582 | 0 | 292 | 3,174 | 8,848 | 295 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 | 0 | 0 | 186 | 186 | 6 |
| Indonesia | 3,465 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,465 | 115 |
| Iran | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) |
| Nigeria | 834 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 834 | 28 |
| Venezuela | 2,621 | 0 | 0 | 0 | 1,445 | 215 | 0 | 1,569 | 2,921 | 0 | 0 | 6,151 | 8,772 | 292 |
| Subtotal Other OPEC | 6,921 | 0 | 0 | 0 | 1,445 | 215 | 0 | 1,569 | 3,108 | 0 | 0 | 6,337 | 13,258 | 442 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 1,553 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 257 | 0 | 0 | 257 | 1,810 | 60 |
| Bahamas | 0 | 0 | 659 | 0 | 0 | 253 | 0 | 387 | 503 | 0 | 0 | 1,802 | 1,802 | 60 |
| Brazil | 0 | 0 | 0 | 0 | 1,207 | 0 | 0 | 0 | 492 | 0 | 0 | 1,699 | 1,699 | 57 |
| Canada | 888 | 227 | 0 | 0 | 277 | 0 | 17 | 475 | 355 | 7 | 209 | 1,568 | 2,456 | 82 |
| Congo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 344 | 0 | 0 | 344 | 344 | 11 |
| Egypt | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | (s) |
| Liberia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 0 | 200 | 200 | 7 |
| Mexico | 2,822 | 0 | 0 | 0 | 287 | 0 | 0 | 381 | (s) | 0 | 0 | 669 | 3,491 | 116 |
| Netherlands | 0 | (s) | 0 | 0 | 679 | 0 | 0 | 573 | 0 | 22 | 0 | 1,274 | 1,274 | 42 |
| Netherlands Antilles | 0 | 0 | 2,331 | 0 | 150 | 0 | 0 | 213 | 4,168 | 0 | 283 | 7,147 | 7,147 | 238 |
| Norway | 572 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 572 | 19 |
| Peru | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 523 | 0 | 0 | 523 | 523 | 17 |
| Puerto Rico | 0 | 0 | 230 | 0 | 204 | 0 | 282 | 0 | 0 | 70 | 158 | 944 | 944 | 31 |
| Romania | 0 | 0 | 0 | 0 | 467 | 0 | 0 | 274 | 0 | 0 | 0 | 740 | 740 | 25 |
| Spain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 64 | 64 | 2 |
| Trinidad and Tobago | 445 | 0 | 0 | 0 | 0 | 0 | 0 | 219 | (s) | 29 | 4 | 252 | 697 | 23 |
| United Kingdom | 8,021 | 107 | 0 | 0 | 133 | 0 | 0 | 0 | 323 | 0 | 40 | 604 | 8,625 | 287 |
| Virgin Islands | 0 | 0 | 618 | 0 | 2,223 | 0 | 0 | 965 | 3,566 | 0 | 0 | 7,373 | 7,373 | 246 |
| Other Western Hemisphere | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,008 | 0 | 0 | 1,008 | 1,008 | 34 |
| Other Eastern Hemisphere | 559 | 0 | 0 | 0 | 234 | 499 | 0 | 721 | 1,374 | (s) | (s) | 2,828 | 3,387 | 113 |
| Subtotal Other | 14,861 | 334 | 3,839 | 0 | 5,861 | 752 | 300 | 4,209 | 13,178 | 128 | 694 | 29,294 | 44,155 | 1,472 |
| **Total Imports** | 27,455 | 334 | 4,132 | 319 | 7,306 | 967 | 300 | 6,464 | 17,868 | 128 | 986 | 38,805 | 66,261 | 2,209 |
| | PAD District II | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 1,537 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,537 | 51 |
| Iraq | 771 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 771 | 26 |
| Saudi Arabia | 1,638 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,638 | 55 |
| Subtotal Arab OPEC | 3,946 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,946 | 132 |

See footnotes at end of table.

## Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1983
(Thousand Barrels)
(continued)

| Source | Crude Oil 1 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 2 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District II** | | | | | | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 376 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 376 | 13 |
| Indonesia | 1,933 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,933 | 64 |
| Iran | 925 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 925 | 31 |
| Nigeria | 1,104 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,104 | 37 |
| Venezuela | 560 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 560 | 19 |
| Subtotal Other OPEC | 4,899 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,899 | 163 |
| **Other** | | | | | | | | | | | | | | |
| Bahamas | 0 | 0 | 194 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 194 | 6 |
| Canada | 5,907 | 4,127 | 209 | 100 | 73 | 0 | 1 | 175 | 299 | 38 | 19 | 5,040 | 10,947 | 365 |
| Congo | 848 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 848 | 28 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | (s) |
| Mexico | 4,355 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,355 | 145 |
| Norway | 357 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 357 | 12 |
| Oman | 1,521 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,521 | 51 |
| Trinidad and Tobago | 838 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 838 | 28 |
| United Kingdom | 1,022 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 1,022 | 34 |
| Other Eastern Hemisphere | 882 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 882 | 29 |
| Subtotal Other | 15,730 | 4,127 | 403 | 100 | 73 | 0 | 1 | 175 | 299 | 38 | 19 | 5,234 | 20,964 | 699 |
| **Total Imports** | 24,575 | 4,127 | 403 | 100 | 73 | 0 | 1 | 175 | 299 | 38 | 19 | 5,234 | 29,809 | 994 |
| **PAD District III** | | | | | | | | | | | | | | |
| **Arab OPEC** | | | | | | | | | | | | | | |
| Algeria | 5,137 | 0 | 335 | 0 | 0 | 0 | 0 | 0 | 345 | 0 | 0 | 680 | 5,817 | 194 |
| Kuwait | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 521 | 0 | 0 | 521 | 521 | 17 |
| Qatar | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | (s) |
| Saudi Arabia | 12,126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 620 | 0 | 0 | 620 | 12,746 | 425 |
| United Arab Emirates | 352 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 352 | 12 |
| Subtotal Arab OPEC | 17,615 | 0 | 335 | 0 | 0 | 0 | 0 | 0 | 1,486 | 0 | 2 | 1,824 | 19,439 | 648 |
| **Other OPEC** | | | | | | | | | | | | | | |
| Ecuador | 1,095 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,095 | 37 |
| Gabon | 2,984 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,984 | 99 |
| Indonesia | 3,166 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,166 | 106 |
| Iran | 1,657 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,657 | 55 |
| Nigeria | 7,768 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 7,775 | 259 |
| Venezuela | 3,909 | 0 | 0 | 0 | 0 | 0 | 0 | 472 | 4 | 181 | 0 | 656 | 4,565 | 152 |
| Subtotal Other OPEC | 20,579 | 0 | 0 | 0 | 0 | 0 | 0 | 472 | 10 | 181 | 0 | 663 | 21,243 | 708 |
| **Other** | | | | | | | | | | | | | | |
| Angola | 1,335 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,335 | 44 |
| Australia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 22 | 22 | 1 |
| Bahamas | 0 | 0 | 1,398 | 0 | 0 | 0 | 0 | 371 | 150 | 193 | 0 | 2,113 | 2,113 | 70 |
| Brazil | 0 | 0 | 0 | 0 | 259 | 0 | 0 | 0 | 0 | 0 | 0 | 259 | 259 | 9 |
| Canada | (s) | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 80 | 3 |
| France | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | (s) |

See footnotes at end of table.

**Table 17. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1983**
**(Thousand Barrels)**
**(continued)**

| Source | Crude Oil 1 | LPG | Unfinished Oils | Gasoline Blending Components | Finished Motor Gasoline | Jet Fuel | Kerosene | Distil. Fuel Oil | Resid. Fuel Oil | Special Naphthas | Other Products 2 | Total Products | Total Petroleum | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAD District III** | | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Mexico | 16,111 | 374 | 208 | 0 | 200 | 176 | (s) | 2 | 14 | 2 | 2 | 980 | 17,090 | 570 |
| Netherlands | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 73 | (s) | 108 | 108 | 4 |
| Norway | 1,385 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,385 | 46 |
| Oman | 2,426 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,426 | 81 |
| People's Republic of China | 0 | 0 | 0 | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 120 | 4 |
| Puerto Rico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 0 | 58 | 58 | 2 |
| Trinidad and Tobago | 926 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 14 | 940 | 31 |
| United Kingdom | 4,518 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,518 | 151 |
| Virgin Islands | 0 | 0 | 1,851 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 1,862 | 1,862 | 62 |
| Zaire | 476 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 476 | 16 |
| Other Western Hemisphere | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 31 | 31 | 1 |
| Other Eastern Hemisphere | 1,786 | 0 | 136 | 0 | 254 | 0 | 0 | 0 | 0 | 47 | 34 | 472 | 2,258 | 75 |
| Subtotal Other | 28,964 | 374 | 3,674 | 156 | 714 | 176 | (s) | 374 | 166 | 414 | 72 | 6,119 | 35,083 | 1,169 |
| **Total Imports** | 67,158 | 374 | 4,009 | 156 | 714 | 176 | (s) | 846 | 1,663 | 595 | 74 | 8,606 | 75,764 | 2,525 |
| **PAD District IV** | | | | | | | | | | | | | | |
| **Other** | | | | | | | | | | | | | | |
| Canada | 1,182 | 341 | 91 | 0 | 54 | 0 | 0 | 63 | 31 | 0 | 55 | 636 | 1,818 | 61 |
| Subtotal Other | 1,182 | 341 | 91 | 0 | 54 | 0 | 0 | 63 | 31 | 0 | 55 | 636 | 1,818 | 61 |
| **Total Imports** | 1,182 | 341 | 91 | 0 | 54 | 0 | 0 | 63 | 31 | 0 | 55 | 636 | 1,818 | 61 |
| **PAD District V** | | | | | | | | | | | | | | |
| **Other OPEC** | | | | | | | | | | | | | | |
| Indonesia | 5,841 | 0 | 0 | 0 | 240 | 28 | 0 | 0 | 373 | 0 | 437 | 1,079 | 6,919 | 231 |
| Venezuela | 255 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 255 | 9 |
| Subtotal Other OPEC | 6,096 | 0 | 0 | 0 | 240 | 28 | 0 | 0 | 373 | 0 | 437 | 1,079 | 7,174 | 239 |
| **Other** | | | | | | | | | | | | | | |
| Canada | 153 | 168 | 0 | 0 | 31 | 0 | (s) | 0 | 5 | 15 | 10 | 230 | 383 | 13 |
| Malaysia | 0 | 0 | 0 | 0 | 123 | 12 | 0 | 0 | 2 | 0 | 0 | 137 | 137 | 5 |
| Mexico | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 19 | 23 | 23 | 1 |
| Netherlands Antilles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 389 | 0 | 0 | 389 | 389 | 13 |
| People's Republic of China | 0 | 0 | 0 | 665 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 665 | 665 | 22 |
| Other Eastern Hemisphere | 0 | 0 | 0 | 0 | 22 | 54 | 0 | 50 | 65 | 0 | 17 | 208 | 208 | 7 |
| Subtotal Other | 153 | 168 | 0 | 665 | 176 | 66 | (s) | 51 | 464 | 15 | 46 | 1,653 | 1,805 | 60 |
| **Total Imports** | 6,248 | 168 | 0 | 665 | 417 | 94 | (s) | 51 | 838 | 15 | 483 | 2,731 | 8,980 | 299 |

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.
2 Includes aviation gasoline, waxes, asphalt, lubricants, natural gasoline, isopentane, plant condensate, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products.
(s) Less than 500 barrels or less than 500 barrels per day.
Note: Totals may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

## Table 18. Exports Of Crude Oil And Petroleum Products By PAD District, September 1983
(Thousand Barrels)

| Commodity | Petroleum Administration for Defense Districts | | | | | |
|---|---|---|---|---|---|---|
| | I | II | III | IV | V | Total |
| Crude Oil (including lease condensate) [1] | 0 | 525 | 0 | 0 | 4,790 | 5,315 |
| Liquefied Petroleum Gases | 147 | 1,692 | 658 | 1 | 92 | 2,589 |
| Ethane | (s) | 0 | 0 | 0 | 0 | (s) |
| Propane | 127 | 689 | 408 | (s) | 37 | 1,260 |
| Butane | 19 | 1,003 | 250 | 1 | 55 | 1,329 |
| Butane-Propane Mixtures | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 1 | 164 | (s) | (s) | 245 | 411 |
| Naphtha-Type Jet Fuel | (s) | 0 | 0 | 0 | 0 | (s) |
| Kerosene-Type Jet Fuel | (s) | 0 | 240 | 0 | 29 | 270 |
| Kerosene | 1 | 4 | (s) | 0 | (s) | 5 |
| Distillate Fuel Oil | 127 | 0 | 203 | 0 | 768 | 1,097 |
| Residual Fuel Oil | (s) | 0 | 1,877 | 0 | 2,155 | 4,032 |
| Naphtha < 400 Deg. for Petrochem. Feedstock | 37 | 8 | 118 | 2 | 5 | 171 |
| Other Oils > 400 Deg. for Petrochem. Feedstock | (s) | 66 | 523 | 0 | 1 | 591 |
| Special Naphthas | 370 | 1 | 31 | 0 | 1 | 403 |
| Lubricants | 100 | 19 | 376 | 1 | 59 | 555 |
| Waxes | 6 | (s) | 24 | 0 | 6 | 35 |
| Petroleum Coke | 365 | 175 | 2,164 | 0 | 2,294 | 4,998 |
| Asphalt | 2 | (s) | (s) | 1 | 1 | 3 |
| Miscellaneous Products | 15 | (s) | 35 | 0 | 5 | 56 |
| Total Product Exports | 1,171 | 2,130 | 6,249 | 5 | 5,661 | 15,216 |
| Total Exports | 1,171 | 2,656 | 6,249 | 5 | 10,451 | 20,531 |

[1] Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels.

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation.

**Table 19. Exports of Crude Oil and Petroleum Products by Destination, September 1983**
**(Thousand Barrels)**

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Argentina | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 7 | (s) | 0 | 0 | (s) | 8 | (s) |
| Australia | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 1 | (s) | 220 | 1 | 3 | 225 | 7 |
| Bahamas | 0 | 4 | 1 | (s) | 100 | 384 | 0 | 2 | 0 | 0 | 0 | (s) | 491 | 16 |
| Bahrain | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | (s) | 64 | 2 |
| Belgium & Luxembourg | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 5 | (s) | 503 | 0 | 2 | 510 | 17 |
| Brazil | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 9 | 0 | 1 | 0 | 1 | 11 | (s) |
| Cameroon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Canada | 525 | 1,706 | 405 | 0 | 2 | 378 | 3 | 57 | 3 | 299 | 1 | 92 | 3,472 | 116 |
| Chile | 0 | (s) | 0 | 0 | 0 | 0 | (s) | 8 | (s) | (s) | (s) | (s) | 9 | (s) |
| China (Taiwan) | 0 | 0 | 0 | 0 | 0 | 671 | (s) | 10 | (s) | (s) | 0 | 1 | 683 | 23 |
| Colombia | 0 | 6 | 0 | 0 | 0 | 0 | (s) | 1 | 16 | (s) | 0 | 1 | 24 | 1 |
| Costa Rica | 0 | 7 | 0 | 0 | 7 | 0 | 4 | 4 | (s) | 0 | 0 | 2 | 24 | 1 |
| Denmark | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | 0 | 1 | (s) |
| Dominican Republic | 0 | 63 | 0 | 0 | 0 | 0 | 0 | 3 | (s) | 0 | 0 | 1 | 67 | 2 |
| Ecuador | 0 | 90 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | (s) | 91 | 3 |
| Egypt | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 5 | (s) |
| El Salvador | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | (s) | 0 | 0 | (s) | 2 | (s) |
| Finland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| France | 0 | (s) | 0 | 0 | 0 | 0 | (s) | 1 | 2 | 174 | 0 | 4 | 181 | 6 |
| French Pacific Isl | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Ghana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Greece | 0 | 2 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | 2 | (s) |
| Guatemala | 0 | 68 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | (s) | 1 | 72 | 2 |
| Honduras | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 1 | 10 | (s) |
| Hong Kong | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 2 | (s) | 0 | (s) | (s) | 3 | (s) |
| India | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 29 | (s) | 0 | 0 | 11 | 41 | 1 |
| Indonesia | 0 | 0 | 0 | 0 | (s) | 0 | (s) | 2 | (s) | 0 | 0 | 1 | 3 | (s) |
| Iran | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) |
| Israel | 0 | 2 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | (s) | 2 | (s) |
| Italy | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 639 | 0 | 118 | 757 | 25 |
| Ivory Coast | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | (s) | (s) | (s) |
| Jamaica | 0 | 22 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | 0 | 0 | (s) | 23 | 1 |
| Japan | 0 | (s) | 0 | 0 | 49 | 632 | 7 | 18 | 2 | 1,243 | 0 | 56 | 2,006 | 67 |
| Jordan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Korea, Republic of | 0 | 1 | 0 | 0 | (s) | 483 | (s) | 2 | (s) | 33 | 0 | 3 | 522 | 17 |
| Kuwait | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | (s) |
| Lebanon | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 1 | (s) |
| Liberia | 0 | (s) | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 0 | 2 | 3 | (s) |
| Malaysia | 0 | 0 | 0 | 0 | (s) | 0 | 0 | (s) | 0 | 0 | 0 | (s) | 1 | (s) |
| Mexico | 0 | 398 | 5 | 29 | 0 | 0 | 12 | 151 | 4 | 18 | 0 | 6 | 623 | 21 |
| Netherlands | 0 | 1 | 0 | 0 | 0 | 215 | 143 | 3 | (s) | 303 | (s) | 165 | 830 | 28 |
| Netherlands Antilles | 0 | (s) | 0 | 0 | 371 | 205 | 0 | (s) | 0 | 0 | 0 | (s) | 576 | 19 |
| New Zealand | 0 | 0 | 0 | 0 | 158 | 0 | 0 | (s) | (s) | 116 | (s) | 1 | 274 | 9 |
| Nicaragua | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | (s) | 0 | 0 | (s) | 3 | (s) |
| Nigeria | 0 | 0 | 0 | 240 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | (s) | 280 | 9 |
| Norway | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 72 | (s) | 1 | 74 | 2 |
| Pacific Trust Terr. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | (s) | (s) |
| Panama | 0 | 18 | 0 | 0 | 18 | 220 | 2 | 20 | (s) | 0 | (s) | 2 | 279 | 9 |
| Peru | 0 | 34 | 0 | 0 | 190 | 0 | 0 | 9 | 0 | 0 | 0 | 17 | 250 | 8 |
| Philippines | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | (s) | (s) | 0 | 1 | 4 | (s) |
| Puerto Rico | 1,149 | 32 | (s) | 0 | 0 | (s) | (s) | 16 | 1 | 0 | 0 | 9 | 1,207 | 40 |
| Rep. of South Africa | 0 | (s) | 0 | 0 | 0 | 0 | (s) | 11 | 5 | 64 | (s) | 172 | 253 | 8 |
| Saudi Arabia | 0 | 1 | 0 | 0 | 0 | 0 | (s) | 43 | 0 | 0 | 0 | 6 | 50 | 2 |

See footnotes at end of table.

## Table 19. Exports of Crude Oil and Petroleum Products by Destination, September 1983
(Thousand Barrels)
(continued)

| Destination | Crude Oil 1 | LPG | Finished Motor Gasoline | Jet Fuel | Dist. Fuel Oil | Residual Fuel Oil | Special Naphthas | Lubri-cants | Waxes | Petro-leum Coke | Asphalt | Other | Total | Total (Daily Average) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Singapore | 0 | 3 | 0 | 0 | 0 | 125 | 4 | 4 | (s) | 0 | (s) | (s) | 135 | 5 |
| Spain | 0 | 0 | 0 | 0 | 203 | 0 | 0 | 8 | (s) | 633 | 0 | 65 | 908 | 30 |
| Surinam | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | 0 | 15 | 0 | (s) | 16 | 1 |
| Sweden | 0 | 0 | 0 | 0 | 0 | 0 | 222 | 2 | (s) | 0 | (s) | (s) | 224 | 7 |
| Switzerland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) | (s) | 0 | (s) | 1 | (s) |
| Thailand | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | (s) | 0 | 0 | 1 | 2 | (s) |
| Trinidad and Tobago | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 2 | (s) | 0 | 0 | (s) | 2 | (s) |
| Turkey | 0 | 0 | 0 | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | (s) |
| United Arab Emirates | 0 | (s) | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 58 | 0 | 1 | 66 | 2 |
| United Kingdom | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 | (s) | 111 | (s) | 23 | 144 | 5 |
| U.S.S.R. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | (s) |
| Uruguay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | (s) | 1 | (s) |
| Venezuela | 0 | (s) | 0 | 0 | 0 | 0 | 3 | (s) | (s) | 88 | 0 | 1 | 94 | 3 |
| Virgin Islands | 3,089 | 1 | 0 | 0 | 0 | 719 | 0 | (s) | 0 | 0 | 0 | (s) | 3,809 | 127 |
| West Germany | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 254 | (s) | 11 | 270 | 9 |
| Yugoslavia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | (s) | 0 | 84 | 0 | 0 | 84 | 3 |
| Other | 552 | 118 | 0 | 0 | 0 | 0 | (s) | 42 | (s) | 7 | (s) | 32 | 750 | 25 |
| Total | 5,315 | 2,589 | 411 | 270 | 1,097 | 4,032 | 403 | 555 | 35 | 4,998 | 3 | 823 | 20,531 | 684 |

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

(s) Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.

Source: See Explanatory Notes on Data Collection and Estimation.

## Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, September 1983
(Thousand Barrels)

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian #1 | Total | Appalachian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Crude Oil (incl. lease condensate)** | | | | | | | | | | | | | | | | | |
| Refinery | — | — | 14,788 | — | — | — | — | 13,827 | — | — | — | — | — | 48,167 | 1,850 | 22,340 | 100,972 |
| Tank Farms and Pipelines | — | — | 1,011 | — | — | — | — | 61,543 | — | — | — | — | — | 96,090 | 9,654 | 31,871 | 200,169 |
| Leases | — | — | 59 | — | — | — | — | 1,586 | — | — | — | — | — | 17,266 | 1,317 | 1,657 | 21,905 |
| Strategic Petroleum Reserve[1] | — | — | 0 | — | — | — | — | 0 | — | — | — | — | — | 361,000 | 0 | 0 | 361,000 |
| Alaskan In-Transit | — | — | 0 | — | — | — | — | 0 | — | — | — | — | — | 0 | 0 | 28,587 | 28,587 |
| Total | — | — | 15,858 | — | — | — | — | 76,956 | — | — | — | — | — | 522,543 | 12,821 | 84,455 | 712,633 |
| **Total Stocks, All Oils (excl. Crude Oil)** | | | | | | | | | | | | | | | | | |
| Refinery | 42,967 | 2,797 | 45,764 | 1,141 | 38,842 | 6,204 | 14,005 | 60,192 | 9,961 | 83,961 | 47,744 | 4,504 | 1,314 | 147,484 | 9,513 | 61,048 | 324,001 |
| Bulk Terminal | — | — | 126,158 | — | — | — | — | 94,926 | — | — | — | — | — | 92,093 | 2,443 | 25,426 | 341,046 |
| Pipeline | — | — | 27,745 | — | — | — | — | 33,576 | — | — | — | — | — | 40,102 | 2,395 | 4,246 | 108,064 |
| Natural Gas Processing Plant | 214 | 43 | 257 | 0 | 192 | 40 | 1,351 | 1,583 | 1,954 | 1,276 | 750 | 75 | 170 | 4,225 | 180 | 160 | 6,405 |
| Total | — | — | 199,924 | — | — | — | — | 190,277 | — | — | — | — | — | 283,904 | 14,531 | 90,880 | 779,516 |
| **Natural Gasoline and Isopentane** | | | | | | | | | | | | | | | | | |
| Refinery | 16 | 0 | 16 | 0 | 32 | 32 | 138 | 202 | 131 | 322 | 123 | 1 | 15 | 592 | 7 | 18 | 835 |
| Bulk Terminal | — | — | 64 | — | — | — | — | 1,022 | — | — | — | — | — | 3,175 | 4 | 0 | 4,265 |
| Pipeline | — | — | 0 | — | — | — | — | 329 | — | — | — | — | — | 594 | 21 | 5 | 949 |
| Natural Gas Processing Plant | 3 | 9 | 12 | 0 | 19 | 10 | 149 | 178 | 328 | 179 | 162 | 25 | 26 | 720 | 33 | 16 | 959 |
| Total | — | — | 92 | — | — | — | — | 1,731 | — | — | — | — | — | 5,081 | 65 | 39 | 7,008 |
| **Unfractionated Stream** | | | | | | | | | | | | | | | | | |
| Bulk Terminal | — | — | 0 | — | — | — | — | 2,217 | — | — | — | — | — | 1,784 | 0 | 0 | 4,001 |
| Pipeline | — | — | 0 | — | — | — | — | 118 | — | — | — | — | — | 2,519 | 466 | 0 | 3,103 |
| Natural Gas Processing Plant | 0 | 3 | 3 | 0 | 97 | 2 | 757 | 856 | 263 | 936 | 111 | 1 | 10 | 1,321 | 31 | 0 | 2,211 |
| Total | — | — | 3 | — | — | — | — | 3,191 | — | — | — | — | — | 5,624 | 497 | 0 | 9,315 |
| **Plant Condensate** | | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 0 | 6 | 0 | 2 | 8 | 3 | 83 | 0 | 65 | 0 | 151 | 0 | 0 | 159 |
| Pipeline | — | — | 0 | — | — | — | — | 0 | — | — | — | — | — | 204 | 0 | 0 | 204 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 1 | 3 | 3 | 7 | 31 | 16 | 10 | 8 | 0 | 65 | 15 | 0 | 87 |
| Total | — | — | 0 | — | — | — | — | 15 | — | — | — | — | — | 420 | 15 | 0 | 450 |
| **Liquefied Petroleum Gases** | | | | | | | | | | | | | | | | | |
| Refinery | 609 | 9 | 618 | 422 | 1,706 | 97 | 635 | 2,860 | 276 | 4,556 | 2,403 | 39 | 23 | 7,297 | 330 | 587 | 11,692 |
| Bulk Terminal | — | — | 2,139 | — | — | — | — | 29,061 | — | — | — | — | — | 58,184 | 96 | 2,783 | 92,263 |
| Pipeline | — | — | 2,889 | — | — | — | — | 6,040 | — | — | — | — | — | 3,065 | 42 | 0 | 12,036 |
| Natural Gas Processing Plant | 187 | 31 | 218 | 0 | 74 | 25 | 442 | 541 | 1,089 | 142 | 467 | 40 | 133 | 1,871 | 86 | 144 | 2,860 |
| Total | — | — | 5,864 | — | — | — | — | 38,502 | — | — | — | — | — | 70,417 | 554 | 3,514 | 118,851 |

See footnotes at end of table.

## Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, September 1983 (Thousand Barrels) (continued)

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian #1 | Total | Appalachian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Ethane** | | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 734 | 0 | 0 | 0 | 734 | 0 | 0 | 735 |
| Bulk Terminal | — | — | 0 | — | — | — | — | 1,166 | — | — | — | — | — | 2,899 | 0 | 0 | 4,065 |
| Pipeline | — | — | 0 | — | — | — | — | 776 | — | — | — | — | — | 277 | 0 | 0 | 1,053 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 23 | 3 | 1 | 0 | 0 | 3 | 7 | 1 | 0 | 31 |
| Total | — | — | 0 | — | — | — | — | 1,966 | — | — | — | — | — | 3,917 | 1 | 0 | 5,884 |
| **Propane for Petrochemical Feedstock Use** | | | | | | | | | | | | | | | | | |
| Refinery | 18 | 0 | 18 | 0 | 78 | 0 | 0 | 78 | 2 | 5 | 0 | 0 | 0 | 7 | 0 | 0 | 103 |
| Total | — | — | 18 | — | — | — | — | 78 | — | — | — | — | — | 7 | 0 | 0 | 103 |
| **Propane For Other Uses** | | | | | | | | | | | | | | | | | |
| Refinery | 547 | 6 | 553 | 1 | 1,165 | 13 | 202 | 1,381 | 62 | 1,626 | 870 | 4 | 4 | 2,566 | 140 | 99 | 4,739 |
| Bulk Terminal | — | — | 1,780 | — | — | — | — | 18,246 | — | — | — | — | — | 28,300 | 96 | 673 | 49,095 |
| Pipeline | — | — | 2,779 | — | — | — | — | 3,073 | — | — | — | — | — | 1,024 | 7 | 0 | 6,883 |
| Natural Gas Processing Plant | 149 | 30 | 179 | 0 | 37 | 14 | 122 | 173 | 452 | 33 | 339 | 18 | 90 | 932 | 51 | 129 | 1,464 |
| Total | — | — | 5,291 | — | — | — | — | 22,873 | — | — | — | — | — | 32,822 | 294 | 901 | 62,181 |
| **Butane For Petro. Feed Use** | | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 0 | 27 | 0 | 2 | 0 | 29 | 0 | 2 | 44 |
| Total | — | — | 0 | — | — | — | — | 13 | — | — | — | — | — | 29 | 0 | 2 | 44 |
| **Butane For Other Uses** | | | | | | | | | | | | | | | | | |
| Refinery | 44 | 3 | 47 | 310 | 293 | 52 | 320 | 975 | 92 | 1,500 | 800 | 22 | 6 | 2,420 | 138 | 265 | 3,845 |
| Bulk Terminal | — | — | 351 | — | — | — | — | 4,171 | — | — | — | — | — | 13,990 | 0 | 1,424 | 19,936 |
| Pipeline | — | — | 110 | — | — | — | — | 1,071 | — | — | — | — | — | 394 | 0 | 0 | 1,575 |
| Natural Gas Processing Plant | 37 | 1 | 38 | 0 | 10 | 9 | 61 | 80 | 297 | 57 | 84 | 16 | 25 | 479 | 33 | 11 | 641 |
| Total | — | — | 546 | — | — | — | — | 6,297 | — | — | — | — | — | 17,283 | 171 | 1,700 | 25,997 |
| **Butane-Propane Mixtures For Other Uses** | | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 5 | 7 | 5 | 0 | 6 | 23 | 5 | 148 | 182 |
| Bulk Terminal | — | — | 0 | — | — | — | — | 375 | — | — | — | — | — | 47 | 0 | 552 | 974 |
| Pipeline | — | — | 0 | — | — | — | — | 18 | — | — | — | — | — | 632 | 0 | 0 | 650 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 0 | 1 | 0 | 6 | 0 | 1 | 7 |
| Total | — | — | 0 | — | — | — | — | 399 | — | — | — | — | — | 708 | 5 | 701 | 1,813 |
| **Ethane-Propane Mixtures** | | | | | | | | | | | | | | | | | |
| Bulk Terminal | — | — | 0 | — | — | — | — | 3,172 | — | — | — | — | — | 7,759 | 0 | 0 | 10,931 |
| Pipeline | — | — | 0 | — | — | — | — | 619 | — | — | — | — | — | 647 | 35 | 0 | 1,301 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 240 | 240 | 266 | 0 | 0 | 0 | 10 | 276 | 0 | 0 | 516 |
| Total | — | — | 0 | — | — | — | — | 4,031 | — | — | — | — | — | 8,682 | 35 | 0 | 12,748 |

See footnotes at end of table.

**Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, September 1983 (Thousand Barrels) (continued)**

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian #1 | Total | Appalachian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Isobutane** | | | | | | | | | | | | | | | | | |
| Refinery | 0 | 0 | 0 | 111 | 163 | 19 | 113 | 406 | 115 | 657 | 728 | 11 | 7 | 1,518 | 47 | 73 | 2,044 |
| Bulk Terminal | — | — | 8 | — | — | — | — | 1,931 | — | — | — | — | — | 5,189 | 0 | 134 | 7,262 |
| Pipeline | — | — | 0 | — | — | — | — | 483 | — | — | — | — | — | 91 | 0 | 0 | 574 |
| Natural Gas Processing Plant | 1 | 0 | 1 | 0 | 4 | 2 | 19 | 25 | 68 | 49 | 44 | 5 | 5 | 171 | 1 | 3 | 201 |
| Total | — | — | 9 | — | — | — | — | 2,845 | — | — | — | — | — | 6,969 | 48 | 210 | 10,081 |
| **Other Hydrocarbons and Alcohol** | | | | | | | | | | | | | | | | | |
| Refinery | 163 | 0 | 163 | 0 | 102 | 0 | 0 | 102 | 1 | 88 | 34 | 0 | 0 | 123 | 0 | 9 | 397 |
| Total | — | — | 163 | — | — | — | — | 102 | — | — | — | — | — | 123 | 0 | 9 | 397 |
| **Unfinished Oils** | | | | | | | | | | | | | | | | | |
| Refinery | | | | | | | | | | | | | | | | | |
| Naphthas and Lighter | 3,460 | 187 | 3,647 | 48 | 2,344 | 200 | 874 | 3,466 | 826 | 8,925 | 5,733 | 174 | 87 | 15,745 | 529 | 4,862 | 28,249 |
| Kerosene and Lighter Gas Oils | 2,402 | 31 | 2,433 | 0 | 2,194 | 3 | 463 | 2,660 | 757 | 7,390 | 1,473 | 30 | 6 | 9,656 | 490 | 3,546 | 18,785 |
| Heavy Gas Oils | 6,631 | 273 | 6,904 | 120 | 4,205 | 304 | 1,210 | 5,839 | 823 | 11,978 | 7,281 | 306 | 82 | 20,470 | 923 | 9,871 | 44,007 |
| Residuum | 2,395 | 286 | 2,681 | 2 | 2,820 | 9 | 1,257 | 4,088 | 543 | 4,933 | 3,313 | 58 | 0 | 8,847 | 533 | 5,455 | 21,604 |
| Total | 14,888 | 777 | 15,665 | 170 | 11,563 | 516 | 3,804 | 16,053 | 2,949 | 33,226 | 17,800 | 568 | 175 | 54,718 | 2,475 | 23,734 | 112,645 |
| **Motor Gasoline Blending Components** | | | | | | | | | | | | | | | | | |
| Refinery | 5,221 | 100 | 5,321 | 41 | 4,892 | 735 | 1,493 | 7,161 | 1,605 | 8,370 | 7,066 | 140 | 172 | 17,353 | 1,580 | 7,337 | 38,752 |
| Bulk Terminal | — | — | 86 | — | — | — | — | 253 | — | — | — | — | — | 505 | 1 | 306 | 1,151 |
| Pipeline | — | — | 0 | — | — | — | — | 55 | — | — | — | — | — | 26 | 0 | 0 | 81 |
| Total | — | — | 5,407 | — | — | — | — | 7,469 | — | — | — | — | — | 17,884 | 1,581 | 7,643 | 39,984 |
| **Aviation Gasoline Blending Components** | | | | | | | | | | | | | | | | | |
| Refinery | 7 | 0 | 7 | 0 | 78 | 0 | 42 | 120 | 0 | 10 | 148 | 0 | 0 | 158 | 0 | 40 | 325 |
| Total | — | — | 7 | — | — | — | — | 120 | — | — | — | — | — | 158 | 0 | 40 | 325 |
| **Total Finished Motor Gasoline** | | | | | | | | | | | | | | | | | |
| Refinery | 5,372 | 215 | 5,587 | 84 | 6,042 | 1,537 | 2,972 | 10,635 | 2,133 | 8,235 | 4,774 | 661 | 182 | 15,985 | 1,738 | 7,644 | 41,589 |
| Bulk Terminal | — | — | 39,178 | — | — | — | — | 32,205 | — | — | — | — | — | 11,855 | 1,403 | 11,680 | 96,321 |
| Pipeline | — | — | 13,902 | — | — | — | — | 15,402 | — | — | — | — | — | 19,245 | 1,148 | 2,034 | 51,731 |
| Natural Gas Processing Plant | 24 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 38 |
| Total | — | — | 58,691 | — | — | — | — | 58,242 | — | — | — | — | — | 47,085 | 4,303 | 21,358 | 189,679 |
| **Finished Leaded Motor Gasoline** | | | | | | | | | | | | | | | | | |
| Refinery | 2,354 | 130 | 2,484 | 55 | 2,726 | 743 | 1,540 | 5,064 | 1,170 | 3,835 | 1,929 | 336 | 114 | 7,384 | 1,013 | 3,184 | 19,129 |
| Bulk Terminal | — | — | 19,824 | — | — | — | — | 15,562 | — | — | — | — | — | 6,307 | 881 | 5,429 | 48,003 |
| Pipeline | — | — | 7,716 | — | — | — | — | 8,264 | — | — | — | — | — | 9,797 | 743 | 936 | 27,456 |
| Natural Gas Processing Plant | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 22 |
| Total | — | — | 30,036 | — | — | — | — | 28,890 | — | — | — | — | — | 23,488 | 2,647 | 9,549 | 94,610 |

See footnotes at end of table.

## Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, September 1983 (Thousand Barrels) (continued)

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian #1 | Total | Appalachian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Finished Unleaded Motor Gasoline** | | | | | | | | | | | | | | | | | |
| Refinery | 3,018 | 85 | 3,103 | 29 | 3,316 | 794 | 1,432 | 5,571 | 963 | 4,400 | 2,845 | 325 | 68 | 8,601 | 725 | 4,460 | 22,460 |
| Bulk Terminal | — | — | 19,354 | — | — | — | — | 16,643 | — | — | — | — | — | 5,548 | 522 | 6,251 | 48,318 |
| Pipeline | — | — | 6,186 | — | — | — | — | 7,138 | — | — | — | — | — | 9,448 | 405 | 1,098 | 24,275 |
| Natural Gas Processing Plant | 12 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 16 |
| Total | — | — | 28,655 | — | — | — | — | 29,352 | — | — | — | — | — | 23,597 | 1,656 | 11,809 | 95,069 |
| **Finished Aviation Gasoline** | | | | | | | | | | | | | | | | | |
| Refinery | 32 | 0 | 32 | 0 | 123 | 0 | 29 | 152 | 106 | 394 | 144 | 0 | 0 | 644 | 31 | 245 | 1,104 |
| Bulk Terminal | — | — | 418 | — | — | — | — | 443 | — | — | — | — | — | 111 | 6 | 322 | 1,300 |
| Pipeline | — | — | 0 | — | — | — | — | 58 | — | — | — | — | — | 21 | 0 | 0 | 79 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 60 |
| Total | — | — | 450 | — | — | — | — | 653 | — | — | — | — | — | 836 | 37 | 567 | 2,543 |
| **Naphtha-Type Jet Fuel** | | | | | | | | | | | | | | | | | |
| Refinery | 182 | 31 | 213 | 0 | 414 | 42 | 211 | 667 | 306 | 876 | 432 | 147 | 174 | 1,935 | 233 | 974 | 4,022 |
| Bulk Terminal | — | — | 268 | — | — | — | — | 538 | — | — | — | — | — | 123 | 4 | 555 | 1,488 |
| Pipeline | — | — | 165 | — | — | — | — | 159 | — | — | — | — | — | 506 | 80 | 385 | 1,295 |
| Total | — | — | 646 | — | — | — | — | 1,364 | — | — | — | — | — | 2,564 | 317 | 1,914 | 6,805 |
| **Kerosene-Type Jet Fuel** | | | | | | | | | | | | | | | | | |
| Refinery | 1,252 | 0 | 1,252 | 40 | 1,107 | 76 | 88 | 1,311 | 228 | 3,168 | 2,278 | 10 | 76 | 5,760 | 348 | 3,247 | 11,918 |
| Bulk Terminal | — | — | 4,172 | — | — | — | — | 4,264 | — | — | — | — | — | 1,772 | 252 | 2,097 | 12,557 |
| Pipeline | — | — | 3,553 | — | — | — | — | 1,936 | — | — | — | — | — | 4,086 | 114 | 821 | 10,510 |
| Total | — | — | 8,977 | — | — | — | — | 7,511 | — | — | — | — | — | 11,618 | 714 | 6,165 | 34,985 |
| **Kerosene** | | | | | | | | | | | | | | | | | |
| Refinery | 387 | 75 | 462 | 0 | 472 | 55 | 393 | 920 | 48 | 1,140 | 665 | 26 | 103 | 1,982 | 4 | 319 | 3,687 |
| Bulk Terminal | — | — | 2,758 | — | — | — | — | 1,021 | — | — | — | — | — | 870 | 26 | 65 | 4,740 |
| Pipeline | — | — | 185 | — | — | — | — | 158 | — | — | — | — | — | 420 | 0 | 1 | 764 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 3 |
| Total | — | — | 3,405 | — | — | — | — | 2,099 | — | — | — | — | — | 3,275 | 30 | 385 | 9,194 |
| **Distillate Fuel Oils** | | | | | | | | | | | | | | | | | |
| Refinery | 7,671 | 309 | 7,980 | 93 | 6,937 | 1,476 | 2,858 | 11,364 | 993 | 11,534 | 4,648 | 958 | 187 | 18,320 | 1,554 | 5,137 | 44,355 |
| Bulk Terminal | — | — | 52,512 | — | — | — | — | 18,558 | — | — | — | — | — | 7,121 | 607 | 4,646 | 83,444 |
| Pipeline | — | — | 7,014 | — | — | — | — | 9,199 | — | — | — | — | — | 9,217 | 524 | 994 | 26,948 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| Total | — | — | 67,506 | — | — | — | — | 39,121 | — | — | — | — | — | 34,659 | 2,685 | 10,777 | 154,748 |
| **Residual Fuel Oils** | | | | | | | | | | | | | | | | | |
| Refinery | 3,319 | 88 | 3,407 | 24 | 1,621 | 170 | 158 | 1,973 | 272 | 4,667 | 2,741 | 179 | 44 | 7,903 | 474 | 6,416 | 20,173 |
| Bulk Terminal | — | — | 20,122 | — | — | — | — | 1,489 | — | — | — | — | — | 5,919 | 0 | 1,981 | 29,511 |
| Pipeline | — | — | 0 | — | — | — | — | 0 | — | — | — | — | — | 1 | 0 | 6 | 7 |
| Total | — | — | 23,529 | — | — | — | — | 3,462 | — | — | — | — | — | 13,823 | 474 | 8,403 | 49,691 |

See footnotes at end of table.

## Table 20. Stocks of Crude Oil and Petroleum Products By PAD District, September 1983 (Thousand Barrels) (continued)

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appalachian #1 | Total | Appalachian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Naphtha < 400 Deg. Petro. Feedstock** | | | | | | | | | | | | | | | | | |
| Refinery | 31 | 0 | 31 | 0 | 150 | 0 | 52 | 202 | 148 | 873 | 480 | 71 | 0 | 1,572 | 0 | 261 | 2,066 |
| Total | 31 | 0 | 31 | 0 | 150 | 0 | 52 | 202 | 148 | 873 | 480 | 71 | 0 | 1,572 | 0 | 261 | 2,066 |
| **Other Oils > 400 Deg. Petro. Feedstock** | | | | | | | | | | | | | | | | | |
| Refinery | 6 | 0 | 6 | 0 | 25 | 0 | 0 | 25 | 311 | 1,145 | 192 | 0 | 0 | 1,648 | 4 | 474 | 2,157 |
| Total | 6 | 0 | 6 | 0 | 25 | 0 | 0 | 25 | 311 | 1,145 | 192 | 0 | 0 | 1,648 | 4 | 474 | 2,157 |
| **Special Naphthas** | | | | | | | | | | | | | | | | | |
| Refinery | 24 | 59 | 83 | 0 | 141 | 0 | 159 | 300 | 17 | 1,110 | 95 | 168 | 0 | 1,390 | 9 | 279 | 2,061 |
| Bulk Terminal | — | — | 606 | — | — | — | — | 250 | — | — | — | — | — | 90 | 0 | 48 | 994 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 110 | 0 | 0 | 110 |
| Total | — | — | 689 | — | — | — | — | 550 | — | — | — | — | — | 1,590 | 9 | 327 | 3,165 |
| **Lubricants** | | | | | | | | | | | | | | | | | |
| Refinery | 1,030 | 914 | 1,944 | 0 | 635 | 0 | 264 | 899 | 19 | 2,957 | 1,043 | 487 | 0 | 4,506 | 47 | 536 | 7,932 |
| Bulk Terminal | — | — | 1,065 | — | — | — | — | 1,024 | — | — | — | — | — | 241 | 5 | 687 | 3,022 |
| Total | — | — | 3,009 | — | — | — | — | 1,923 | — | — | — | — | — | 4,747 | 52 | 1,223 | 10,954 |
| **Waxes** | | | | | | | | | | | | | | | | | |
| Refinery | 15 | 140 | 155 | 0 | 43 | 0 | 30 | 73 | 24 | 232 | 119 | 89 | 0 | 464 | 0 | 54 | 746 |
| Total | — | — | 155 | — | — | — | — | 73 | — | — | — | — | — | 464 | 0 | 54 | 746 |
| **Petroleum Coke** | | | | | | | | | | | | | | | | | |
| Refinery | 917 | 0 | 917 | 0 | 522 | 72 | 129 | 723 | 4 | 82 | 713 | 152 | 0 | 951 | 148 | 2,091 | 4,830 |
| Total | 917 | 0 | 917 | 0 | 522 | 72 | 129 | 723 | 4 | 82 | 713 | 152 | 0 | 951 | 148 | 2,091 | 4,830 |
| **Asphalt and Road Oil** | | | | | | | | | | | | | | | | | |
| Refinery | 1,558 | 44 | 1,602 | 266 | 2,180 | 1,388 | 538 | 4,372 | 356 | 533 | 1,631 | 676 | 163 | 3,359 | 527 | 1,474 | 11,334 |
| Bulk Terminal | — | — | 2,717 | — | — | — | — | 2,545 | — | — | — | — | — | 306 | 39 | 177 | 5,784 |
| Total | — | — | 4,319 | — | — | — | — | 6,917 | — | — | — | — | — | 3,665 | 566 | 1,651 | 17,118 |
| **Miscellaneous Products** | | | | | | | | | | | | | | | | | |
| Refinery | 267 | 36 | 303 | 1 | 51 | 8 | 10 | 70 | 31 | 360 | 215 | 67 | 0 | 673 | 4 | 172 | 1,222 |
| Bulk Terminal | — | — | 53 | — | — | — | — | 36 | — | — | — | — | — | 37 | 0 | 79 | 205 |
| Pipeline | — | — | 37 | — | — | — | — | 122 | — | — | — | — | — | 198 | 0 | 0 | 357 |
| Natural Gas Processing Plant | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 70 | 3 | 0 | 1 | 0 | 74 | 1 | 0 | 76 |
| Total | — | — | 393 | — | — | — | — | 229 | — | — | — | — | — | 982 | 5 | 251 | 1,860 |
| **Total Stocks, All Oils** | — | — | 215,782 | — | — | — | — | 267,233 | — | — | — | — | — | 806,447 | 27,352 | 175,335 | 1,492,149 |

[1] Includes 33,879 thousand barrels of domestic crude oil.
Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable.

**Table 21. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge Between PAD Districts, September 1983**
**(Thousand Barrels)**

| Commodity | From I to | | | From II to | | | | From III to | | | | From IV to | | | From V to | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | IV | V | I | II | IV | V | II | III | V | I | II | III | IV |
| **Crude Oil (Tanker and Barge only)** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 422 | 1,147 | 0 | 0 | 0 | 0 | 0 | 4,419 | 0 | 15,952 | 0 |
| **Petroleum Products** | 7,983 | 339 | 0 | 3,320 | 5,948 | 2,231 | 694 | 76,440 | 27,784 | 0 | 1,755 | 1,934 | 389 | 959 | 0 | 0 | 65 | 0 |
| Natural Gasoline and Isopentane | 0 | 0 | 0 | 0 | 95 | 0 | 0 | 0 | 371 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unfractionated Stream | 0 | 0 | 0 | 0 | 512 | 0 | 0 | 0 | 1,105 | 0 | 0 | 698 | 389 | 0 | 0 | 0 | 0 | 0 |
| Plant Condensate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 712 | 2,475 | 139 | 0 | 1,599 | 4,533 | 0 | 0 | 274 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 55 | 195 | 0 | 0 | 0 | 0 | 133 | 287 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 989 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 5,334 | 0 | 0 | 1,287 | 1,939 | 1,394 | 0 | 45,924 | 11,660 | 0 | 585 | 559 | 0 | 667 | 0 | 0 | 0 | 0 |
| Finished Leaded Motor Gasoline | 2,852 | 0 | 0 | 519 | 1,014 | 805 | 0 | 18,212 | 5,591 | 0 | 304 | 369 | 0 | 458 | 0 | 0 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 2,482 | 0 | 0 | 768 | 925 | 589 | 0 | 27,712 | 6,069 | 0 | 281 | 190 | 0 | 209 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 9 | 0 | 0 | 11 | 0 | 25 | 0 | 201 | 212 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 83 | 0 | 0 | 0 | 128 | 0 | 0 | 591 | 103 | 0 | 288 | 73 | 0 | 19 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 243 | 0 | 0 | 209 | 64 | 463 | 0 | 8,370 | 1,842 | 0 | 157 | 4 | 0 | 21 | 0 | 0 | 0 | 0 |
| Kerosene | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 333 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 2,155 | 0 | 0 | 521 | 596 | 210 | 0 | 15,504 | 5,655 | 0 | 312 | 321 | 0 | 252 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 124 | 75 | 0 | 561 | 2,225 | 17 | 0 | 375 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha and Other Oils for Petro. Feedstock | 18 | 0 | 0 | 18 | 0 | 0 | 0 | 187 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 59 | 0 | 49 | 9 | 0 | 0 | 623 | 323 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 28 | 0 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 0 | 0 | 204 | 0 | 0 | 0 | 241 | 812 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 36 | 85 | 0 | 185 | 55 | 0 | 0 | 232 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 |
| **Total All Products** | 7,983 | 339 | 0 | 3,320 | 5,948 | 2,231 | 694 | 76,862 | 28,931 | 0 | 1,755 | 1,934 | 389 | 959 | 4,419 | 0 | 16,017 | 0 |

Sources: See Explanatory Notes on Data Collection and Estimation.

**Table 22. Movements of Petroleum Products by Pipeline between PAD Districts, September 1983**
**(Thousand Barrels)**

| Commodity | From I to | | From II to | | | From III to | | | | From IV to | | | From V to | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | I | III | IV | I | II | IV | V | II | III | V | III | IV |
| Natural Gasoline and Isopentane | 0 | 0 | 0 | 95 | 0 | 0 | 371 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Unfractionated Stream | 0 | 0 | 0 | 512 | 0 | 0 | 1,105 | 0 | 0 | 698 | 389 | 0 | 0 | 0 |
| Plant Condensate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 0 | 0 | 712 | 2,475 | 139 | 1,526 | 4,533 | 0 | 0 | 274 | 0 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 905 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 3,909 | 0 | 1,122 | 1,915 | 1,394 | 35,216 | 10,527 | 0 | 585 | 559 | 0 | 667 | 0 | 0 |
| Finished Leaded Motor Gasoline | 2,058 | 0 | 448 | 1,014 | 805 | 14,297 | 5,066 | 0 | 304 | 369 | 0 | 458 | 0 | 0 |
| Finished Unleaded Motor Gasoline | 1,851 | 0 | 674 | 901 | 589 | 20,919 | 5,461 | 0 | 281 | 190 | 0 | 209 | 0 | 0 |
| Finished Aviation Gasoline | 9 | 0 | 0 | 0 | 25 | 39 | 169 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 0 | 0 | 0 | 128 | 0 | 292 | 103 | 0 | 288 | 73 | 0 | 19 | 0 | 0 |
| Kerosene-Type Jet Fuel | 96 | 0 | 204 | 64 | 463 | 5,255 | 1,630 | 0 | 157 | 4 | 0 | 21 | 0 | 0 |
| Kerosene | 40 | 0 | 0 | 0 | 0 | 263 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 1,482 | 0 | 479 | 596 | 210 | 13,193 | 5,170 | 0 | 312 | 321 | 0 | 252 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 0 | 0 | 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 5,536 | 0 | 2,692 | 5,785 | 2,231 | 55,784 | 24,534 | 0 | 1,342 | 1,934 | 389 | 959 | 0 | 0 |

Source: See Explanatory Notes on Data Collection and Estimation.

**Table 23. Movements of Crude Oil and Petroleum Products by Tanker and Barge Between PAD Districts, September 1983**
**(Thousand Barrels)**

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New Eng | Cent Atl | Low Atl | II | V | I | II | III |
| **Crude Oil** | 0 | 0 | 0 | 0 | 0 | 0 | 422 | 0 | 422 | 0 | 1,147 | 0 | 4,419 | 0 | 15,952 |
| **Petroleum Products** | 2,447 | 339 | 0 | 628 | 163 | 694 | 20,656 | 1,172 | 3,327 | 16,157 | 3,250 | 413 | 0 | 0 | 65 |
| Liquefied Petroleum Gases | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 0 | 0 | 73 | 0 | 0 | 0 | 0 | 0 |
| Unfinished Oils | 55 | 195 | 0 | 0 | 0 | 133 | 287 | 0 | 287 | 0 | 0 | 0 | 0 | 0 | 0 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 1,425 | 0 | 0 | 165 | 24 | 0 | 10,708 | 372 | 1,203 | 9,133 | 1,133 | 0 | 0 | 0 | 0 |
| Finished Aviation Gasoline | 0 | 0 | 0 | 11 | 0 | 0 | 162 | 10 | 61 | 91 | 43 | 0 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 83 | 0 | 0 | 0 | 0 | 0 | 299 | 10 | 129 | 160 | 0 | 0 | 0 | 0 | 0 |
| Kerosene-Type Jet Fuel | 147 | 0 | 0 | 5 | 0 | 0 | 3,115 | 233 | 470 | 2,412 | 212 | 0 | 0 | 0 | 0 |
| Kerosene | 10 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 56 | 14 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 673 | 0 | 0 | 42 | 0 | 0 | 2,311 | 489 | 104 | 1,718 | 485 | 0 | 0 | 0 | 0 |
| Residual Fuel Oil | 0 | 0 | 0 | 124 | 75 | 561 | 2,225 | 58 | 171 | 1,996 | 17 | 375 | 0 | 0 | 0 |
| Naphtha and Other Oils for Petro. Feed. Use | 18 | 0 | 0 | 18 | 0 | 0 | 187 | 0 | 78 | 109 | 13 | 0 | 0 | 0 | 0 |
| Special Naphthas | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 0 | 98 | 18 | 114 | 0 | 0 | 0 | 0 |
| Lubricants | 0 | 59 | 0 | 49 | 9 | 0 | 623 | 0 | 439 | 184 | 323 | 38 | 0 | 0 | 28 |
| Waxes | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 0 | 0 | 0 | 204 | 0 | 0 | 241 | 0 | 9 | 232 | 812 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 36 | 85 | 0 | 10 | 55 | 0 | 232 | 0 | 215 | 17 | 14 | 0 | 0 | 0 | 37 |
| **Total** | 2,447 | 339 | 0 | 628 | 163 | 694 | 21,078 | 1,172 | 3,749 | 16,157 | 4,397 | 413 | 4,419 | 0 | 15,017 |

Source: See Explanatory Notes on Data Collection and Estimation.

**Table 24. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge Between PAD Districts, September 1983 (Thousand Barrels)**

| Commodity | P.A.D. District I | | | P.A.D. District II | | | P.A.D. District III | | | P.A.D. District IV | | | P.A.D. District V | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Receipts into PADD I | Shipments from PADD I | Net Receipts PADD I | Receipts into PADD II | Shipments from PADD II | Net Receipts PADD II | Receipts into PADD III | Shipments from PADD III | Net Receipts PADD III | Receipts into PADD IV | Shipments from PADD VI | Net Receipts PADD IV | Receipts into PADD V | Shipments from PADD V | Net Receipts PADD V |
| **Crude Oil (Tanker and Barge only)** | 4,841 | 0 | 4,841 | 1,147 | 0 | 1,147 | 15,952 | 1,569 | 14,383 | 0 | 0 | 0 | 0 | 20,371 | -20,371 |
| **Petroleum Products** | 79,760 | 8,322 | 71,438 | 37,701 | 12,193 | 25,508 | 6,741 | 105,979 | -99,238 | 2,231 | 3,282 | -1,051 | 3,408 | 65 | 3,343 |
| Natural Gasoline | 0 | 0 | 0 | 376 | 95 | 281 | 95 | 371 | -276 | 0 | 5 | -5 | 0 | 0 | 0 |
| Unfractionated Stream | 0 | 0 | 0 | 1,803 | 512 | 1,291 | 901 | 1,105 | -204 | 0 | 1,087 | -1,087 | 0 | 0 | 0 |
| Plant Condensate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Liquefied Petroleum Gases | 2,311 | 0 | 2,311 | 4,807 | 3,326 | 1,481 | 2,475 | 6,132 | -3,657 | 139 | 274 | -135 | 0 | 0 | 0 |
| Unfinished Oils | 287 | 250 | 37 | 55 | 133 | -78 | 195 | 287 | -92 | 0 | 0 | 0 | 133 | 0 | 133 |
| Motor Gasoline Blending Components | 0 | 0 | 0 | 989 | 0 | 989 | 0 | 989 | -989 | 0 | 0 | 0 | 0 | 0 | 0 |
| Aviation Gasoline Blending Components | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Finished Motor Gasoline | 47,211 | 5,334 | 41,877 | 17,553 | 4,620 | 12,933 | 1,939 | 58,169 | -56,230 | 1,394 | 1,226 | 168 | 1,252 | 0 | 1,252 |
| Finished Leaded Motor Gasoline | 18,731 | 2,852 | 15,879 | 8,812 | 2,338 | 6,474 | 1,014 | 24,107 | -23,093 | 805 | 827 | -22 | 762 | 0 | 762 |
| Finished Unleaded Motor Gasoline | 28,480 | 2,482 | 25,998 | 8,741 | 2,282 | 6,459 | 925 | 34,062 | -33,137 | 589 | 399 | 190 | 490 | 0 | 490 |
| Finished Aviation Gasoline | 212 | 9 | 203 | 221 | 36 | 185 | 0 | 413 | -413 | 25 | 0 | 25 | 0 | 0 | 0 |
| Naphtha-Type Jet Fuel | 591 | 83 | 508 | 259 | 128 | 131 | 128 | 982 | -854 | 0 | 92 | -92 | 307 | 0 | 307 |
| Kerosene-Type Jet Fuel | 8,579 | 243 | 8,336 | 2,089 | 736 | 1,353 | 64 | 10,369 | -10,305 | 463 | 25 | 438 | 178 | 0 | 178 |
| Kerosene | 333 | 50 | 283 | 71 | 0 | 71 | 0 | 354 | -354 | 0 | 0 | 0 | 0 | 0 | 0 |
| Distillate Fuel Oil | 16,025 | 2,155 | 13,870 | 8,131 | 1,327 | 6,804 | 596 | 21,471 | -20,875 | 210 | 573 | -363 | 564 | 0 | 564 |
| Residual Fuel Oil | 2,349 | 0 | 2,349 | 17 | 760 | -743 | 75 | 2,617 | -2,542 | 0 | 0 | 0 | 936 | 0 | 936 |
| Naphtha and Other Oils for Petro. Feedstock Use | 205 | 18 | 187 | 31 | 18 | 13 | 0 | 200 | -200 | 0 | 0 | 0 | 0 | 0 | 0 |
| Special Naphthas | 116 | 0 | 116 | 114 | 0 | 114 | 0 | 230 | -230 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lubricants | 672 | 59 | 613 | 323 | 58 | 265 | 96 | 984 | -888 | 0 | 0 | 0 | 38 | 28 | 10 |
| Waxes | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 7 | -7 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asphalt and Road Oil | 445 | 0 | 445 | 812 | 204 | 608 | 0 | 1,053 | -1,053 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous Products | 417 | 121 | 296 | 50 | 240 | -190 | 177 | 246 | -69 | 0 | 0 | 0 | 0 | 37 | -37 |
| **Total All Products** | 84,601 | 8,322 | 76,279 | 38,848 | 12,193 | 26,655 | 22,693 | 107,548 | -84,855 | 2,231 | 3,282 | -1,051 | 3,408 | 20,436 | -17,028 |

Sources: See Explanatory Notes on Data Collection and Estimation.

**Table 25. Production of Residual Fuel Oil By Sulfur Content, September 1983**
**(Thousand Barrels)**

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian #1 | Total | Appala-chian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Residual Fuel Oil** | 2,379 | 41 | 2,420 | 80 | 1,300 | 176 | 270 | 1,826 | 635 | 7,619 | 2,494 | 287 | 47 | 11,082 | 345 | 8,775 | 24,448 |
| 0.00 to 0.30% Sulfur | 668 | 37 | 705 | 0 | 123 | 0 | 102 | 225 | 66 | 240 | 221 | 84 | 7 | 618 | 56 | 653 | 2,257 |
| 0.31 to 1.00% Sulfur | 1,515 | 0 | 1,515 | -25 | 334 | 0 | 84 | 393 | 449 | 1,464 | 812 | 151 | 0 | 2,876 | 113 | 3,079 | 7,976 |
| Greater Than 1.00% Sulfur | 196 | 4 | 200 | 105 | 843 | 176 | 84 | 1,208 | 120 | 5,915 | 1,461 | 52 | 40 | 7,588 | 176 | 5,043 | 14,215 |

Source: See Explanatory Notes on Data Collection and Estimation.

**Table 26. Stocks of Residual Fuel Oil By Sulfur Content, September 1983**
**(Thousand Barrels)**

| Commodity | PAD District I | | | PAD District II | | | | | PAD District III | | | | | | PAD Dist. IV | PAD Dist. V | United States |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | East Coast | Appala-chian #1 | Total | Appala-chian #2 | Ind., Ill., Ky. | Minn., Wisc., Daks. | Okla., Kans., Mo. | Total | Texas Inland | Texas Gulf Coast | La. Gulf Coast | No. La., Ark. | New Mexico | Total | Rocky Mt. | West Coast | |
| **Residual Fuel Oil -- 0.00 to 0.30% Sulfur** | | | | | | | | | | | | | | | | | |
| Refinery | 527 | 36 | 563 | 0 | 148 | 0 | 52 | 200 | 40 | 143 | 104 | 19 | 9 | 315 | 133 | 537 | 1,748 |
| Bulk Terminal | — | — | 4,480 | — | — | — | — | 89 | — | — | — | — | — | 242 | 0 | 107 | 4,918 |
| Total | — | — | 5,043 | — | — | — | — | 289 | — | — | — | — | — | 557 | 133 | 644 | 6,666 |
| **Residual Fuel Oil -- 0.31 to 1.00% Sulfur** | | | | | | | | | | | | | | | | | |
| Refinery | 1,736 | 3 | 1,739 | 24 | 479 | 0 | 67 | 570 | 155 | 1,038 | 1,027 | 69 | 0 | 2,289 | 115 | 2,130 | 6,843 |
| Bulk Terminal | — | — | 6,530 | — | — | — | — | 616 | — | — | — | — | — | 3,424 | 0 | 341 | 10,911 |
| Total | — | — | 8,269 | — | — | — | — | 1,186 | — | — | — | — | — | 5,713 | 115 | 2,471 | 17,754 |
| **Residual Fuel Oil -- Greater than 1.00% Sulfur** | | | | | | | | | | | | | | | | | |
| Refinery | 1,056 | 49 | 1,105 | 0 | 994 | 170 | 39 | 1,203 | 77 | 3,486 | 1,610 | 91 | 35 | 5,299 | 226 | 3,749 | 11,582 |
| Bulk Terminal | — | — | 9,112 | — | — | — | — | 784 | — | — | — | — | — | 2,253 | 0 | 1,533 | 13,682 |
| Total | — | — | 10,217 | — | — | — | — | 1,987 | — | — | — | — | — | 7,552 | 226 | 5,282 | 25,264 |

Sources: See Explanatory Notes on Data Collection and Estimation.
— Not Applicable

**Table 27. Movements of Residual Fuel Oil by Tanker and Barge Between PAD Districts, By Sulfur Content, September 1983**
**(Thousand Barrels)**

| Commodity | From I to | | | From II to | | | From III to | | | | | | From V to | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | II | III | V | I | III | V | I | New Eng | Cent Atl | Low Atl | II | V | I | II | III |
| **Residual Fuel Oil** | 0 | 0 | 0 | 124 | 75 | 561 | 2,225 | 58 | 171 | 1,996 | 17 | 375 | 0 | 0 | 0 |
| 0.00 to 0.30% Sulfur | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.31 to 1.00% Sulfur | 0 | 0 | 0 | 5 | 0 | 561 | 606 | 0 | 0 | 606 | 0 | 375 | 0 | 0 | 0 |
| Greater Than 1.00% Sulfur | 0 | 0 | 0 | 119 | 75 | 0 | 1,619 | 58 | 171 | 1,390 | 17 | 0 | 0 | 0 | 0 |

Source: See Explanatory Notes on Data Collection and Estimation.

**Table 28. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September 1983 (Thousand Barrels)**

| Country | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **Arab OPEC** | | | | |
| Algeria | 833 | 1,094 | 0 | 1,927 |
| Iraq | 0 | 0 | 0 | 0 |
| Kuwait | 0 | 0 | 521 | 521 |
| Libya | 0 | 0 | 0 | 0 |
| Qatar | 0 | 0 | 0 | 0 |
| Saudi Arabia | 0 | 0 | 620 | 620 |
| United Arab Emirates | 0 | 0 | 0 | 0 |
| Subtotal Arab OPEC | 833 | 1,094 | 1,141 | 3,069 |
| **Other OPEC** | | | | |
| Ecuador | 0 | 0 | 186 | 186 |
| Gabon | 0 | 0 | 0 | 0 |
| Indonesia | 373 | 0 | 0 | 373 |
| Iran | 0 | 0 | 0 | 0 |
| Nigeria | 0 | 0 | 7 | 7 |
| Venezuela | 497 | 0 | 2,428 | 2,925 |
| Subtotal Other OPEC | 871 | 0 | 2,621 | 3,491 |
| **Other** | | | | |
| Angola | 0 | 257 | 0 | 257 |
| Australia | 0 | 0 | 0 | 0 |
| Bahamas | 403 | 100 | 150 | 653 |
| Bolivia | 0 | 0 | 0 | 0 |
| Brazil | 292 | 200 | 0 | 492 |
| Brunei | 0 | 0 | 0 | 0 |
| Canada | 264 | 138 | 288 | 690 |
| Congo | 167 | 177 | 0 | 344 |
| Egypt | 0 | 0 | 0 | 0 |
| France | 0 | 0 | 0 | 0 |
| Ghana | 0 | 0 | 0 | 0 |
| Liberia | 200 | 0 | 0 | 200 |
| Malaysia | 0 | 0 | 2 | 2 |
| Mexico | 12 | 0 | 7 | 18 |
| Netherlands | 0 | 0 | 0 | 0 |
| Netherlands Antilles | 0 | 0 | 4,557 | 4,557 |
| Norway | 0 | 0 | 0 | 0 |
| Oman | 0 | 0 | 0 | 0 |
| People's Republic of China | 0 | 0 | 0 | 0 |
| Peru | 0 | 0 | 523 | 523 |
| Puerto Rico | 0 | 0 | 0 | 0 |
| Romania | 0 | 0 | 0 | 0 |
| Spain | 0 | 0 | 64 | 64 |
| Syria | 0 | 0 | 0 | 0 |
| Trinidad | (s) | 0 | 0 | (s) |
| Tunisia | 0 | 0 | 0 | 0 |
| United Kingdom | 0 | 323 | 0 | 323 |
| Virgin Islands | 179 | 2,241 | 1,148 | 3,567 |
| Yugoslavia | 0 | 0 | 0 | 0 |
| Zaire | 0 | 0 | 0 | 0 |
| Other Western Hemisphere | 537 | 0 | 471 | 1,008 |
| Other Eastern Hemisphere | 544 | 599 | 296 | 1,440 |
| Subtotal Other | 2,598 | 4,035 | 7,505 | 14,138 |
| **Total Imports** | 4,301 | 5,129 | 11,267 | 20,698 |

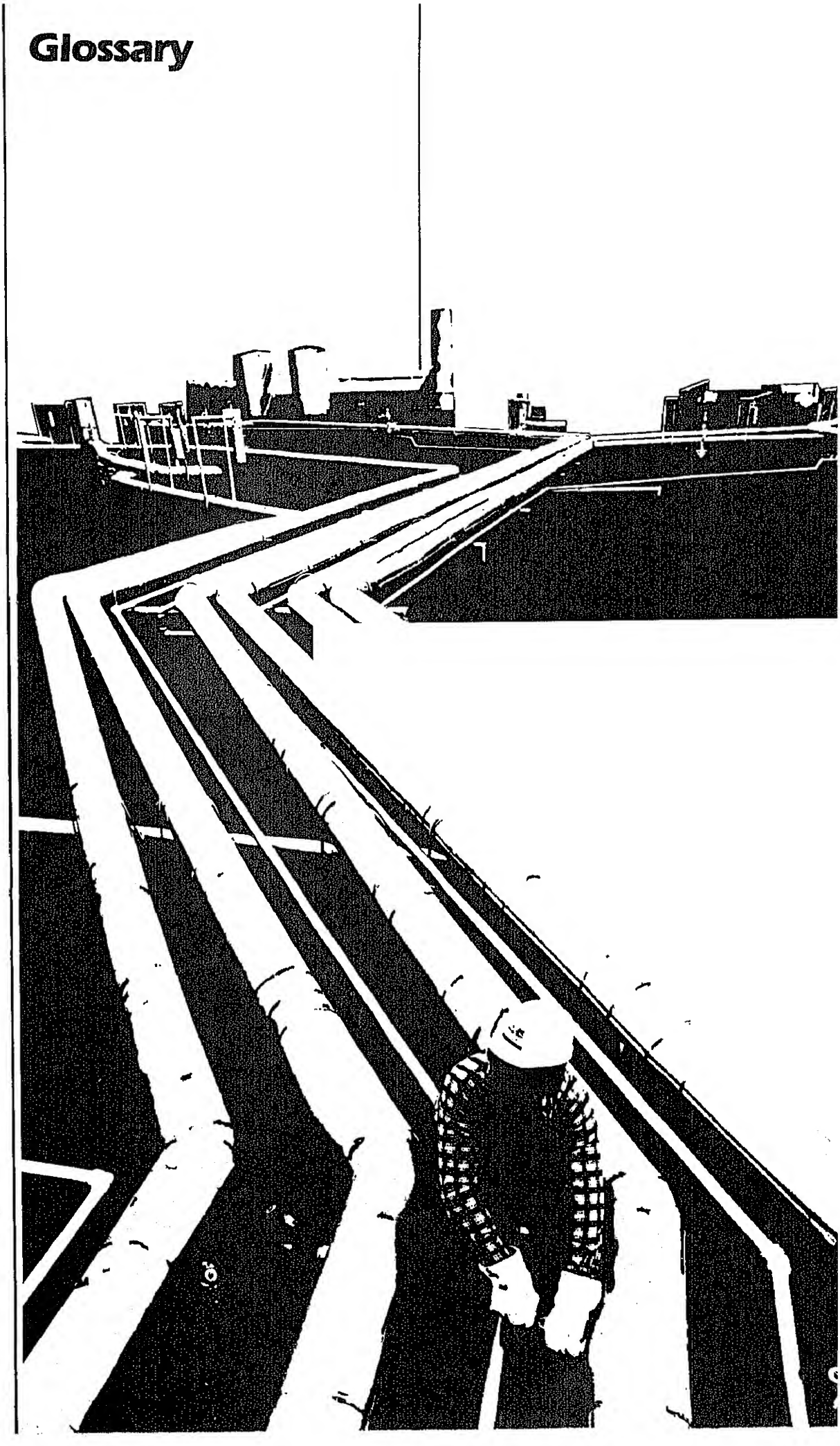
(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

Table 29. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, September 1983
(Thousand Barrels)

| State | Residual Fuel Oil | | | |
|---|---|---|---|---|
| | 0.00 to 0.30% | 0.31 to 1.00% | Greater Than 1.00% | Total |
| **PAD District I** | 3,734 | 4,739 | 9,395 | 17,868 |
| Florida | 0 | 929 | 1,120 | 2,049 |
| Georgia | 0 | 0 | 224 | 224 |
| Maine | 0 | 155 | 833 | 988 |
| Maryland | 53 | 311 | 279 | 642 |
| Massachusetts | 0 | 323 | 599 | 922 |
| New Hampshire | (s) | 0 | 151 | 151 |
| New Jersey | 955 | 936 | 1,074 | 2,965 |
| New York | 2,661 | 1,756 | 3,329 | 7,747 |
| North Carolina | (s) | 0 | 206 | 207 |
| Pennsylvania | 59 | 0 | 105 | 164 |
| Rhode Island | 0 | 0 | 47 | 47 |
| South Carolina | 0 | 0 | 311 | 311 |
| Vermont | 6 | 0 | 0 | 6 |
| Virginia | 0 | 329 | 1,116 | 1,446 |
| **PAD District II** | 183 | 45 | 70 | 299 |
| Illinois | 52 | 0 | 0 | 52 |
| Michigan | 55 | 45 | 0 | 100 |
| Minnesota | 4 | 0 | 23 | 28 |
| North Dakota | 1 | 0 | 32 | 33 |
| Ohio | 70 | 0 | 15 | 85 |
| **PAD District III** | 11 | 345 | 1,306 | 1,663 |
| Louisiana | (s) | 0 | 10 | 10 |
| Texas | 11 | 345 | 1,296 | 1,653 |
| **PAD District IV** | 0 | 0 | 31 | 31 |
| Montana | 0 | 0 | 31 | 31 |
| **PAD District V** | 374 | 0 | 464 | 838 |
| California | 0 | 0 | 392 | 392 |
| Hawaii | (s) | 0 | 67 | 67 |
| Washington | 373 | 0 | 5 | 378 |
| **All PAD Districts** | 4,301 | 5,129 | 11,267 | 20,698 |

(s) Less than 500 barrels.
Note: Total may not equal sum of components due to independent rounding.
Sources: See Explanatory Notes on Data Collection and Estimation.

# Glossary



# Definitions of Petroleum Products and Other Terms

***Alcohol.*** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group; CH-(CH)n-OH. *Alcohol* includes methanol and ethanol.

***Alkylation.*** A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

***API Gravity.*** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr 60F/60F}} - 131.5$$

***Aromatics.*** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

***Asphalt.*** A dark-brown-to-black cement-like material, containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

***ASTM.*** The acronym for the American Society for Testing and Materials.

***Aviation Gasoline Blending Components.*** Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

***Aviation Gasoline, Finished.*** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

***Barrel.*** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

***Barrels per Calendar Day.*** The maximum number of barrels of input that can be processed in a twenty-four hour period after making allowances for the following limitations: downstream limitations, environmental constraints, types and grades of inputs, planned and unplanned downtime, and types and grades of products.

***Barrels Per Stream Day.*** The amount a unit can process running at full capacity under optimal crude and product slate conditions.

***Bi-metallic.*** A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g., platinum, rhenium).

***Butane.*** A normally gaseous paraffinic hydrocarbon, C4H10. It is extracted from natural gas or refinery gas streams. Butane is covered by ASTM Specification D1835 and Gas Processors Association Specification for commercial butane.

- ***Isobutane.*** A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. This classification includes mixtures of gases that contain 80 percent liquid volume or more isobutane. It is extracted from natural gas and refinery gas streams.

- ***Normal Butane.*** A saturated straight-chain hydrocarbon of butane. It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. This classification includes mixtures of gases that contain 80 percent or more normal butane.

- ***Other Butanes.*** All butanes not included as normal butane or isobutane.

***Butane-Propane Mixtures.*** Mixtures consisting exclusively of butane and propane that conform to ASTM Specification D1835 and Gas Processors Association Specification for commercial butane-propane mixtures. They are extracted from natural gas and refinery gas streams.

***Butylene.*** An olefinic hydrocarbon, C4H8, recovered from refinery processes.

***Catalytic Cracking.*** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

***Catalytic Hydrocracking.*** A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

***Catalytic Hydrotreating.*** A process for treating petroleum fractions (e.g., distillate fuel oil and residual fuel oil) and unfinished oils (e.g., naphthas, reformer feeds and heavy gas oil) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

***Catalytic Reforming.*** The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane

gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

***Conventional.*** A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g., platinum, alumina).

***Coal.*** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. Includes lignite, bituminous coal, and anthracite coal which conform to ASTM Specification D388.

***Crude Distillation.*** The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling.

***Crude Oil*** (including Lease Condensate). A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gas is also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following:

***Domestic.*** Crude oil produced in the United States or from its outer continental shelf as defined in 43 U.S.C. 1331.

***Foreign.*** Crude oil produced outside the United States.

***Delayed Coking.*** A process to produce low Conradson carbon gas for catalytic cracking feedstock and for gasoline.

***Distillate Fuel Oil.*** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuel.

***No. 1 Fuel Oil.*** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 420 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

***No. 2 Fuel Oil.*** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

***No. 1 and No. 2 Diesel Fuel Oils.*** Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

***No. 1-D.*** A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under wide variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specifications D975.

***No. 2-D.*** A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

***No. 4 Fuel Oil.*** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

***Eastern Hemisphere.*** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa, and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

***Electric Energy (Purchased).*** Electricity purchased for refinery operations that is not produced within the refinery complex.

***Ethane.*** A normally gaseous paraffinic compound ($C_2H_6$) extracted from natural gas and refinery gas streams. "Ethane" includes any products containing 90 percent liquid volume or more ethane.

***Ethane-Propane Mixtures.*** Mixtures of ethane and propane in which neither component is 90 percent or more of the liquid volume. It is extracted from natural gas and refinery gas streams.

***Ethylene.*** An olefinic hydrocarbon, ($C_2H_4$) recovered from refinery or petrochemical processes.

***Field Production.*** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

***Fluid Coking.*** A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

***Gasoline Blending Components.*** Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

***Gas Oil.*** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

***Imported Crude Oil Burned as Fuel.*** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. *Imported crude oil burned as fuel* includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and oil shale.

***Isomerization.*** A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

***Kerosene.*** A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D-3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

***Kerosene-Type Jet Fuel.*** A quality kerosene product with an average gravity of 40.7 degrees API, a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specifications MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turboprop aircraft engines.

***Lease Condensate.*** A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

***Liquefied Petroleum Gases (LPG).*** Propane, propylene, butanes, butylene, butane-propane mixtures, ethane-propane mixtures, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

***Liquefied Refinery Gases (LRG).*** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane and/or ethylene, propane and/or propylene, butane and/or butylene, butane-propane mixtures, and isobutane. Excludes still gases used for chemical or rubber manufacture which are reported as a petrochemical feedstock and also excludes liquefied gases ready for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstocks or other uses.

***Lubricating Oils.*** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. *Lubricants* includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include Bright Stock, Neutral, and Other.

- ***Bright Stock.*** A refined, high viscosity lubricating oil base stock that is usually made from residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.
- ***Neutral.*** A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.
- ***Other.*** A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils.

***Middle Distillates.*** A general classification that includes distillate fuel oil and kerosene.

***Miscellaneous Products.*** Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

***Motor Gasoline Blending Components.*** Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

***Motor Gasoline, Finished.*** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122 degrees to 158 degrees F. at the 10-percent point to 365 degrees to 374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. *Motor gasoline* includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

***Finished Leaded Gasoline.*** Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

***Finished Unleaded Gasoline.*** Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

***Gasohol.*** A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

***Motor Gasoline, Total.*** Includes finished leaded motor gasoline, finished unleaded motor gasoline, motor gasoline blending components, and gasohol.

***Naphtha-Type Jet Fuel.*** A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F., meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

***Natural Gas.*** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

***Natural Gas Field Facility.*** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas; however, some field facilities are designed to recover propane, butane, natural gasoline, etc., and to control the quality of natural gas to be marketed.

***Natural Gas Plant Liquids.*** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials, and are classified as follows: Ethane, propane, ethane-propane mix, isobutane, butane, butane-propane mix, isopentane, natural gasoline, plant condensate, unfractionated stream, and other products from natural gas processing plants (i.e., products meeting the standards of finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

***Natural Gasoline and Isopentane.*** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, C5H12, obtained by fractionation of natural gasoline or isomerization of normal pentane.

***OPEC.*** The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

***Operable Distillation Capacity.*** The maximum amount of input that can be processed by a crude oil distillation unit in a 24-hour period, making allowances for processing limitations due to types and grades of inputs, limitations of downstream facilities, scheduled and unscheduled downtimes, and environmental constraints. Includes any shutdown capacity that could be placed in operation within 90 days.

***Other Hydrocarbons.*** Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

***Petrochemical Feedstock Use.*** Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are *Naphtha-less than 400 degrees F. end-point* and *Other oils-over 400 degrees F. end-point*.

***Naphtha-Less Than 400 Degrees F. End-Point.*** A naphtha with an end point of less than 400 degrees F. that is reported as used as a petrochemical feedstock.

***Other Oils-Over 400 Degrees F. End-Point.*** Oils with an end point over 400 degrees F. that is reported as used as a petrochemical feedstock.

***Petroleum Coke.*** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is five barrels of 42 U.S. gallons per short ton.

***Marketable Coke.*** Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This *green* coke may be sold or further purified by calcining.

***Catalyst Coke.*** In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

***Petroleum Products.*** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, natural gasoline and isopentane, plant condensate, unfractionated stream, liquefied petroleum gases, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400° F. end-point, other oils-over 400° F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

***Petroleum Refinery.*** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

***Plant Condensate.*** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

***Primary Stocks.*** Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. *Primary Stocks* excludes stocks of foreign origin that are held in bonded warehouse storage.

***Propane.*** A normally gaseous paraffinic compound, C3H8, which includes all products covered by NGPA Specification for commercial and HD-5 propane and ASTM Specification D1835. It is used primarily as a fuel and as a petrochemical feedstock.

***Propylene.*** An olefinic hydrocarbon, C3H6, recovered from refinery or petrochemical processes.

***Residual Fuel Oil.*** The topped crude of refinery operation which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Includes imported crude oil to be burned as a fuel.

***Road Oil.*** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

***Special Naphthas.*** All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. *Special naphthas* includes all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

***Steam (Purchased).*** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

***Still Gas (Refinery Gas).*** Any form or mixture of gas produced in refineries by distillation cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

***Petrochemical Feedstock Use.*** Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc., are considered petrochemical products; therefore, only their feed-stock equivalents are included.

***Fuel Use.*** All other still gas.

***Strategic Petroleum Reserve (SPR).*** Stocks (currently, only crude oil) maintained by the Federal Government for use during periods of major supply interruption.

***Thermal Cracking.*** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

***Unfinished Oils.*** Includes all oils requiring further processing, except those requiring only mechanical blending.

***Unfractionated Streams.*** Mixtures of unsegregated natural gas liquid components excluding those included in plant condensate. This product is extracted from natural gas.

***Vacuum Distillation.*** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique, with its relatively low temperatures, prevents cracking or decomposition of the charge stock.

***Visbreaking.*** A thermal cracking process in which heavy vacuum-still bottoms produced on the primary

distillation unit are cracked to increase production of distillate products.

***Wax.*** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-gallon barrel.

***Microcrystalline Wax.*** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D-1321)-60 maximum. Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS) (D-88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum. Oil content (D-721)-5 percent minimum.

***Crystalline-Fully Refined Wax.*** A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.5 percent maximum. Other + 20 color, Saybolt minimum.

***Crystalline-Other Wax.*** A paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D-88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D-721)-0.51 percent minimum to 15 percent maximum.

***Western Hemisphere.*** That half of the earth that includes North and South America and the surrounding waters.

# Bureau of Mines Petroleum Refining Districts and PAD Districts

*The following are the Bureau of Mines petroleum refining districts which make up the PAD districts:*

## PAD District I

***East Coast:*** District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

***Appalachian #1:*** The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

## PAD District II

***Appalachian #2:*** The following counties of the State of Ohio: Erie, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

***Indiana—Illinois—Kentucky:*** The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

***Minnesota—Wisconsin—North and South Dakota:*** The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

***Oklahoma—Kansas—Missouri:*** The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

## PAD District III

***Texas Inland:*** The State of Texas except the Texas Gulf Coast District.

***Texas Gulf Coast:*** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

***Louisiana Gulf Coast:*** The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

***North Louisiana—Arkansas:*** The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

***New Mexico:*** The State of New Mexico.

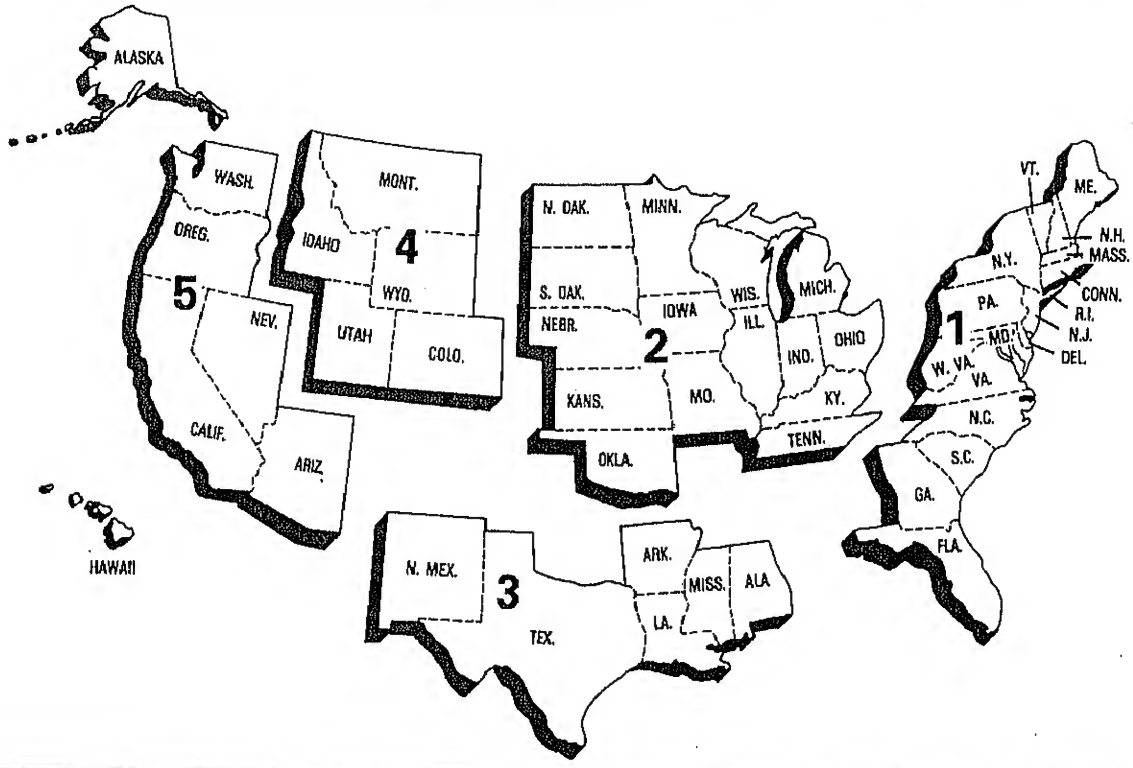
## PAD District IV

***Rocky Mountain:*** The States of Montana, Idaho, Wyoming, Utah, and Colorado.

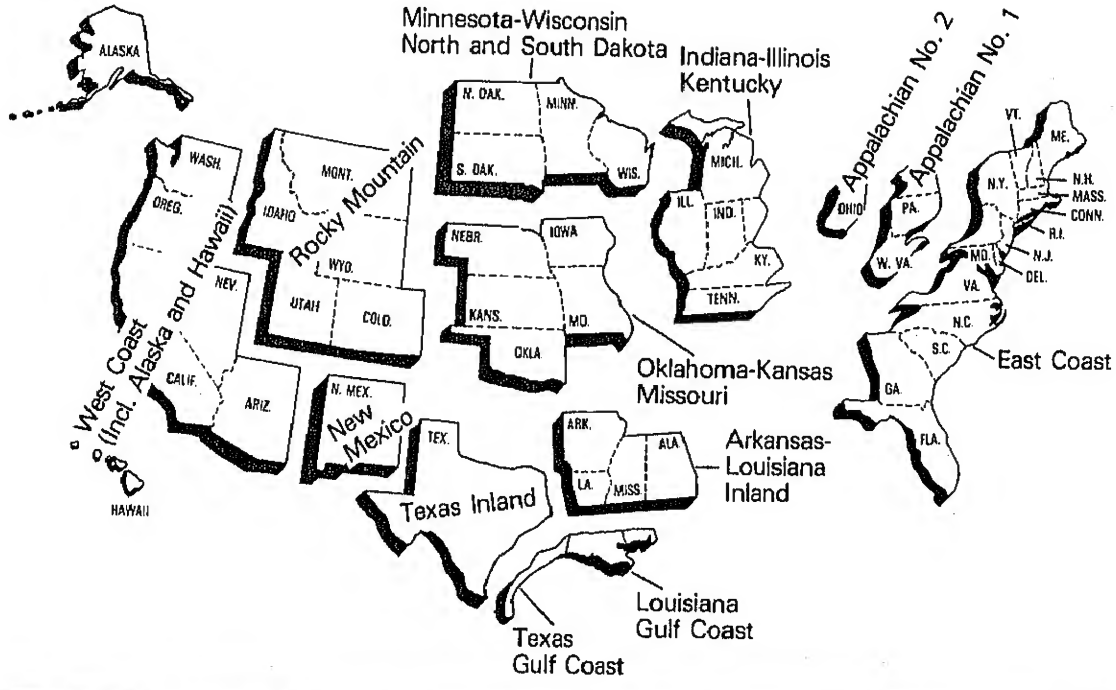
## PAD District V

***West Coast:*** The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

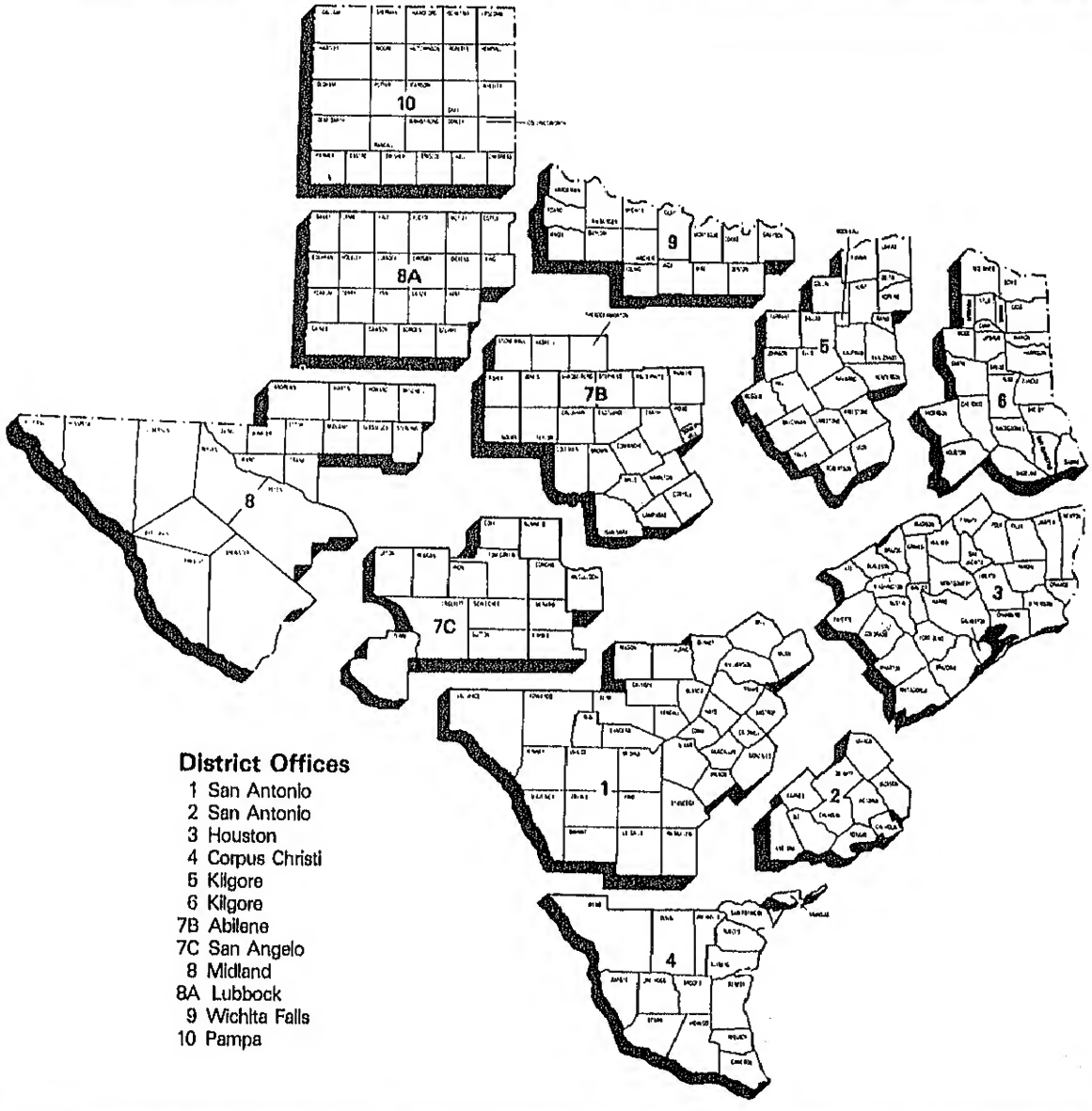
## Petroleum Administration for Defense (PAD) Districts




## Bureau of Mines Refining Districts



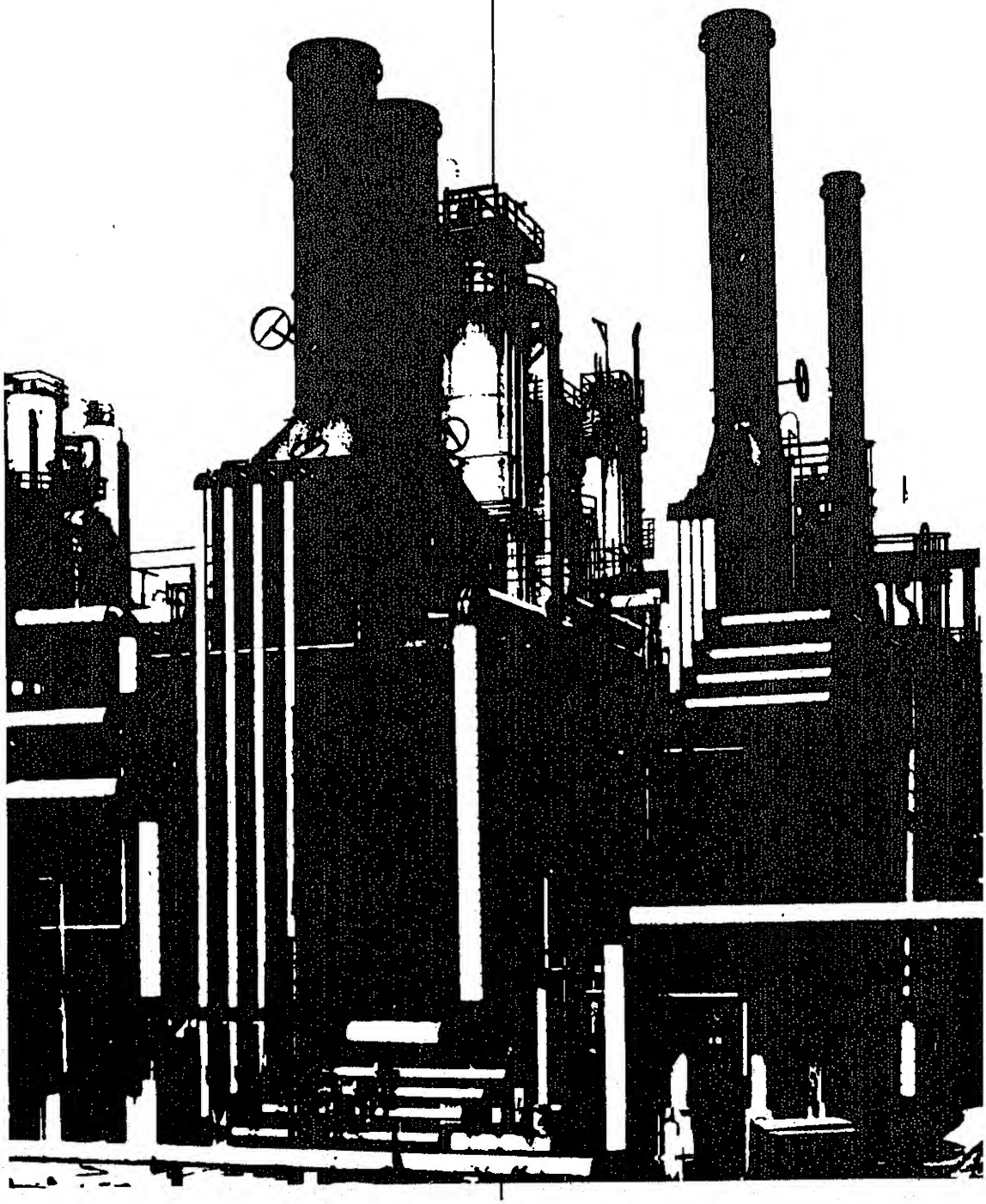
## District Map, Oil and Gas Division Railroad Commission of Texas




**District Offices**

1 San Antonio
2 San Antonio
3 Houston
4 Corpus Christi
5 Kilgore
6 Kilgore
7B Abilene
7C San Angelo
8 Midland
8A Lubbock
9 Wichita Falls
10 Pampa

# Explanatory Notes



## Note 1: Data Collection Methodology

### Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

| New Form Number | Name | Old Form Number |
|---|---|---|
| EIA-800 | Weekly Refinery Report | EIA-161 |
| EIA-801 | Weekly Bulk Terminal Report | EIA-162 |
| EIA-802 | Weekly Product Pipeline Report | EIA-163 |
| EIA-803 | Weekly Crude Oil Stocks Report | EIA-164 |
| EIA-804 | Weekly Imports Report | EIA-165 |
| EIA-805 | Weekly Shipments from Puerto Rico to the United States Report | — |
| EIA-810 | Monthly Refinery Report | EIA-87 |
| EIA-811 | Monthly Bulk Terminal Report | EIA-88 |
| EIA-812 | Monthly Product Pipeline Report | EIA-89 |
| EIA-813 | Monthly Crude Oil Report | EIA-90 |
| ERA-60 | Monthly Imports Report | ERA-60 |
| EIA-815 | Monthly Shipments from Puerto Rico to the United States Report | FEA-P133-M-0 |
| EIA-816 | Monthly Natural Gas Liquids Report | EIA-64 |
| EIA-817 | Monthly Tanker and Barge Movement Report | EIA-170 |

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly* (*PSM*). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the *PSM*. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the *PSM*. A description of the Census data follows in Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report.*

### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800:** Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

**EIA-801:** Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

**EIA-802:** Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

**EIA-803:** Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

**EIA-804:** Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

**EIA-805:** Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

### Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report.*

### Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

### Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month ($M_t$) is divided by the amount reported by the sample of companies for the most recent month ($M_s$). The result is multiplied by the amount reported by the sample of companies for the current week ($W_s$). The answer, $W_t$, is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s}(W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

### Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems

were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

## Respondent Frame

**EIA-810:** All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

**EIA-811:** All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

**EIA-812:** All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

**EIA-813:** All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

**EIA-815:** All licensed importers and importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the *PSM*.

**EIA-816:** All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

**EIA-817:** All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

**ERA-60:** All licensed importers and importers of record importing crude oil and petroleum products into the United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

## Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

## Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates, if necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

## Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1982, the ERA-60 survey had a response rate of 98 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

## Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data

### Background

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases, bonded ships bunkers and military offshore use are published in the *PSM*.

### Import Statistics (IM-145)

#### Coverage

The import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.

2. Shipments from anywhere to U.S. possessions and shipments from U.S. possessions to the United States. (U.S. possessions include Puerto Rico, the Virgin Islands, Guam, and American Samoa.)

3. U.S. merchandise that was held in foreign countries by the U.S. Armed Forces and is returned to the United States for the use of the Armed Forces.

#### Source of Import Information

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

#### Country and Area of Origin

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

### Export Statistics (EM-522 and EM-594)

#### Coverage

The export statistics reflect both government and nongovernment exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.

2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

#### Source of Export Information

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Custom's officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

### Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

**Refinery Production** of LRGs, ethane, and finished petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. It should also be noted that refineries do not export production of crude oil, natural gasoline, isopentane, unfractionated stream, plant condensate, or other hydrocarbons.

**Imports** of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501 and 7505. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum gases (LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade and for military offshore use. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

**Stock Withdrawal (+) or Addition (−)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (−) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

## Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Crude Oil Losses** is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

**Refinery inputs** of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

**Exports** of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

**Product supplied** for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus refinery input, minus exports. This formula ensures that total disposition equals total supply.

Products supplied indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

Product supplied for crude oil is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

## Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

## Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, liquefied petroleum gases, and other products provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The

average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (on Arpil 1 and October 1), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. For crude oil stocks, the derived seasonal factors are very small relative to crude oil stock levels. Therefore, the seasonal factors for distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products are derived using monthly data from 1974-1980. For motor gasoline, the seasonal factors are based on monthly data from 1975, 1976, 1978, 1979 and 1980. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year. In addition, the seasonal patterns in 1973, 1974 and 1977 were not representative of the recent past, and these years were not used in the determination of seasonal patterns for motor gasoline stocks. Because of these differences in the year-to-year seasonal fluctuation of motor gasoline, the evidence for the illustrated seasonal patterns for crude oil, distillate fuel oil, residual fuel oil, liquefied petroleum gases and other products is stronger than is the evidence for the illustrated seasonal patterns for motor gasoline.

In some cases, these seasonal patterns do not show a smooth transition from month to month. For example, the June factor for residual fuel oil is slightly less than the May and July values, making a bump in the curve. As there is little difference in the magnitude of these seasonal factors, it is possible that this variation is due to the small number of observations (7 years) and the data variability.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817 and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months, it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (−), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

• Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

• Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

• Total Crude Oil and Petroleum Products Ending Stocks appear in thousands of barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition** statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

• Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (−), Unaccounted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

• Crude losses and Product Supplied appear as labeled in Table 4.

• SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousands of barrels in Table 1.

• Total Crude Oil Ending Stocks appear in thousands of barrels in Table 2.

• Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Exports, and Product Supplied appear as labeled in Table 4.

• Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.

• Ending Stocks appear in thousands of barrels in Table 2.

**Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Exports, and Product Supplied appear as labeled in Table 4.

• Ending Stocks appear in thousands of barrels in Table 2.

**Note 9.5 Liquefied Petroleum Gases Supply and Disposition** statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

• Total Production is the sum of Field Production and Refinery Production in Table 4.

• Imports, Stocks Withdrawal (+) or Addition (−), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

• Ending stocks appear in thousands of barrels in Table 2.

**Note 9.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

• Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.

• Imports, Stock Withdrawal (+) or Addition (−), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.

• Ending stocks are aggregated from ending stocks in thousands of barrels in Table 2.

**Note 9.7 Table 1. U.S. Petroleum Balance**

• Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska*, *Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.

• Line (5): *SPR Imports* are reported on Survey Form ERA-60.

• Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (−) plus unaccounted for crude oil minus crude losses in Table 2.

• Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.

• Line (15): NGPL *Imports* equals the sum of the im-

ports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.

• Line (16): NGPL *Stock Withdrawal (+) or Addition (−)* is equal to the sum of stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.

• Line (17) equals the sum of lines (14), (15), and (16).

• Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (−)* equals stock withdrawal (+) or addition (−) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

• Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2.

• Line (21): *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

• Line (23): *Total Other Liquids* equals the sum of lines (18) through (22).

• Line (24): *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

• Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

• Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

• Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

• Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (−) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

• Line (29): *Refined Products Stocks Withdrawal (+) or Addition (−)* equals the sum of stock withdrawal (+) or addition (−) for LPG and finished petroleum products in Table 2.

• Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

• Lines (31) through (35) equal the respective products supplied in Table 2.

• Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

• Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

• The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

• Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

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